REPORT

ON THE

AGRICULTURAL STATISTICS

OF

Bagirhat and Sunderbuns, District Jessore.

July
water
south

1872-73.

By BABU RAMSHUNKER SEN,

Deputy Magistrate and Deputy Collector, Jessore.

III-124

Calcutta:

PRINTED AT THE BENGAL SECRETARIAT PRESS.

1874.

REPORT

ON THE

Agricultural Statistics of the Baghat Sub-Division,

DISTRICT JESSORE.

Soon after submitting my report on the Jhenidah and Magurah sub-divisions, I was deputed, under orders of the Commissioner of the Presidency division, dated 25th July 1873, to take up any part of the Bagirhat sub-division not under water, with a view to bring out the difference between the north and south of the district, and was further directed to see if any of the rich portion of the Sunderbun country was workable at that season, as it was His Honor the Lieutenant-Governor's wish that my enquiries should extend to the same.

The tract examined.

On reaching Bagirhat on the 17th August 1873, I found that the tract lying to the north of the Bhairab, and included in the Mollahat thannah, was part of an interminable hollow, which extended on both sides of the Madhomati, and as it was wholly under water I had to exclude it from the scope of my enquiries and confine myself to the Bagirhat thannah alone.

On inspecting the Sunderbun country, it appeared to me that Morrellgunge, which had been explored about 24 years ago, could be taken in hand, and when a part of my establishment was relieved of work in Bagirhat I deemed it proper to extend my enquiries to the Rampal thannah also, the lower parts of which contained plantations which had been reclaimed within various recent dates.

The present report therefore embraces the whole of the Baghat* sub-division, with the exception of the triangular morass country included in the Mollahat thannah lying to the north.

CHAPTER I.

BAGIRHAT.

General features of country.

The great hollow and low-lying tract which spreads over eastern Jessore like a vast inland sea, and through which the river Bhairab winds its way, has its southern boundary broadly demarcated by that stream, from its junction with the Attarabanka at Alaipore to the point where, after following a tortuous south-easterly course, it pours its waters into the Baleswar near

* The words Bagirhat and Baghat refer to one and the same place throughout this report.

Kachua. South of this lies the great Sunderbun country, in which the work of reclamation has gone on from the 15th century* with a slow but steady pace, and where human energy, in a continuous fight with jungle, has driven the forest line downwards, until at the present day† nearly half of what was formerly an unproductive and impenetrable woody waste has been converted into smiling gardens of graceful palm and immense fields of waving rice.

Early reclamation.

The earliest reclaimer of whom we have any trace was Keshwar Khan, more widely known as Alg Khan Jehan Ali, who flourished in the days when Nazir Shah was independent king of Bengal (1426-1457 A. D.), and who died when Babek Shah had succeeded to the throne of his father (1458 A. D.) It is said that Khan Jehan Ali,‡ who was a Patan by birth, was the monarch's *punka bardar* (fan-bearer), who having attained sanctity through the influence of a faquir, became a great traveller and colonist, erected mosques and excavated tanks wherever he went, and finally settled at a place near Bagirhat, where his tombs, mosques, and roads still attest to his past greatness. The tract of country which he reclaimed is still known as "Hawali Khalifat-e-abad."§

A deed of separation, dated 1133 B.S. (1726 A. D.), in the possession of the Karapara family (near Bagirhat), shews that on the dismemberment of Rajah Protapaditya's possessions in 1590 A. D., pergunnah Havili, with the adjacent divisions of Madhudia and Bangaon (Chirulia), fell to the portion of the descendants of Protapaditya's sister Bhabani. Tradition also points out that that powerful chieftain, who had gradually absorbed all the clearances of Khan Jehan Ali into his dominions, had made over the pergunnahs of Rangdia and Sultanpore Khororea to one of his servants, Janoki Ballabh Sirkar, a Vaidya by caste, whose descendants, known as the Vaidya Chowdhries of Mulghar, could not long keep their lands, which passed through various hands before the date of the decennial settlement.

The earliest possessors of pergunnah Hogla‖ of whom we have any trace were the (Kashyap) Brahmins of Lockpur, although it is very difficult to ascertain the probable date of their ascendancy. From them the pergunnah passed on to the Boses of Piljang, but was restored to them after two generations, through the instrumentality of Rajah Raj Ballabh, who flourished in the first half of the 18th century. The Brahmins were, however, obliged to transfer their interests to the ancestors of some of the present zemindars of the pergunnah.

Of pergunnah Selimabad, lying on the banks of the Baleswar, little more is known than that it came into the hands of a family of jungle-clearers who settled long ago at Royerkati, east of that river, where there is abundance of sweet water, and where their position and influence have led to their being locally styled as "Rajahs" to this day.

I have been led thus to give a faint sketch of these fiscal divisions (Selimabad, Havili, Cherulia, Madhudia, Rangdia, Hogla, and Khororea) which constitute the police jurisdiction of Bagirhat, in the hope that a history of their gradual reclamation, lying immediately as they do to the north of the Sunderbun province, may not be uninteresting.

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* Khan Jehan Ali, the great reclaimer, died in 1458 A.D. (*Mr. Westland's report on Jessore.*)

† In the census report 1872, page 11, Appendix B, the area reclaimed from 1830 is laid down as 10 per cent. My estimate approximately marks the progress from the 15th century to 1830.—See Rennel's map dated 1772.

‡ Alg Khan and Khan Jehan Ali were Turkish titles which disappeared under the Moguls. See Indian Antiquary, page 262, 1872.

§ Clearance effected under orders of the emperor.

‖ From "Hogla," a reed which grows plentifully on the banks of the Sunderbun creeks, and extensively used in the manufacture of mats.

That the Bhairab, which perforates the country lying within these pergunnahs, was the northern boundary of the Sunderbun forest is farther attested by the fact that when the Jatrapur cut was made in 1872, trunks and roots of sundri and pussar trees were found imbedded in the soil at the depth of several feet below its surface, and at a mile's distance west of Khulna (situated on the Bhairab) the remains of sundri trees were discovered 18 feet below the present surface in the course of excavating a tank.*

Old forest remains.

The village sites are almost all confined to the river banks, which being higher than the surrounding country and always accessible by water, are universally preferred for the purposes of habitation. On both sides of the Bhairab a continuous line of dense bamboo jungle and areca, date, and cocoanut gardens, presents itself, hiding completely from the view all human dwellings, of whose existence the shaded pathway leading to the river is the only indication. These clusters are intercepted every now and then by creeks which issue out of the river, over which the rude ingenuity of the villagers has erected a high bamboo bridge of dimensions so slender as to render any other attempt but a passage on bare-foot dangerous. On emerging from these villages, in which bamboo, mango, cocoa and other palms lie thick together, one meets with an extensive rice prairie, gradually subsiding from under his feet until at the centre he finds himself at the bottom of a basin-shaped area bounded by an imaginary line, on the skirts of which other village sites loom in the distance, occupying ridges above the reach of ordinary floods.

Baghat; its village sites.

The police division of Baghat contains an area of 229 square miles, with a population of 138,560 souls spread over 307 villages, the number of persons per square mile being 605. Its present food-producing area, as found by enquiry, is 121,022 acres, which at ·87 acre per head leaves a wide margin for exports. The proportion in the north of the district is ·6 of an acre per head.

Its present cultivated area.

Vide Statistical Return D (a), Agriculture (Appendix No. 1).

SECTION I.

AGRICULTURE.

It is difficult to speak with precision in what order the various staples were gradually introduced into the country after reclamation had begun in the 15th century. The early clearances effected under the influence of Khan Jehan Ali and Protapaditya led to the introduction of the bamboo, vegetables, the earlier species of *dhan*, and other cereals and the date, while the cocoa and betel nut palms appear to have travelled from the east; for tradition assigns to these, and to the better species of *dhan* included in the generic name of *amun*, an eastern origin; the early settlers at Maghua, Kachua, and Banagram being all colonists from the left bank of the Baleswar, where these staples flourish in luxuriance. When these two classes of colonists met, they interchanged with one another the crops they had brought, and the result may now be seen in the date and fan palms growing side by side with the cocoa and areca; and the *man kochu* (*Arum Indicum*) of the drier parts of Jessore flourishing on the banks of the tidal creeks of the south. Such minor crops as the *boro* dhan in Chirulia pergunnah, turmeric and dark *moong* in Rangdia, have been introduced within the memory of man, and

Its past history uncertain.

* Colonel Gastrell's report on Jessore, &c., 1868, p. 26.

an old servent of the Goberdanga zemindar at Jatrapore assured me that their cultivation had increased within the last 10 or 12 years.

Rice. Rice is emphatically the great staple of these tracts, and the land is so fertile that scarcely any plot is left fallow for a term, in order to allow it to regain its strength by a period of rest. The only uncultivated tracts being marshes and wastes covered with *nal* jungle.

Other crops. The areca and cocoanut. Next to rice, but coming intermediately between the *aus* and the *amun* crops, are the areca and cocoanut, which rising thick about the ryot's tenement, materially help him in adding to his income. The *pân* gardens in which the betel leaf is extensively grown are confined to the banks of the Bhairab, while the date tree may be seen growing sparsely in homesteads and on ridges near the river banks; unlike the north, where whole areas bristle with forests of his palm. The bamboo is also reared in patches, but its growth is not so luxuriant as in other parts.

Winter crops. The winter crops, such as pulses of various kinds and oil-seeds, and the minor grain, *cheena*, *kaon*, *bhura*, wheat, barley, &c., used as food in the north, are not well adapted to the low soil of these parts, and, excepting a little mustard grown near homesteads, and the dark *moong*, *musuri*, and *kalai*, &c., raised on the banks of creeks, the cultivation of these cereals may be said to be quite unknown.

The *tal*. The *tal* (*Borassus Flabelli formis*), which grows everywhere quite uncared for, deserves some notice, as its fruit is much relished by the people in these parts, as evinced by the local trade carried on in it in the months of August and September, when it arrives at maturity. Of vegetables, the *panea kachu* (a species of arum root) and the *man kachu*, grow plentifully east and south of Baghat, and are in great request; while the *lau* (bottle gourd) and the brinjal, are also reared. The potato is quite unknown to the district, while the *pulwal* and other vegetables of the north are to be scarcely met with here.

Vegetables.

Indigo given up. Indigo flourished in the western parts of Baghat at Lokpur, Gour-rumbha, Boleaghata, &c., about 25 years ago, but has been given up in consequence of its being a losing speculation.

The ryots' rice lands. The ryot in these parts has two classes of land for the raising of food-crops, one near his homestead, which he cultivates in April and May. In June he embarks in a boat with his cattle, ploughs, and provisions for his *kati* or jungle-cleared lands, where he with the assistance of his *krishans* or cultivators ploughs them up, having at the outset spread his dhan on a well-chosen seed bed. By the time the ploughing is complete the seedlings are fit to be transplanted; and after accomplishing this task he returns home to his already ploughed-up fields, where he goes on planting the upland rice. At intervals he visits his lowland fields and watches their growth. They, however, need no further care at his hands, until in December and January he comes again with his party of *dawals* (grain-cutters) in order to reap the harvest. These come in large numbers from the north, from Furreedpore and Kooshtea in boats, each of which contains a separate gang.

In *abads* or *kati* lands the rice harvest as soon as gathered changes hands at the spot. The *dawals* are paid their portion, and the landholder's agent, who comes to realize his arrears of rent at this time, is also satisfied. A specific quantity is laid by for home consumption and seed-grain, while the bulk of the surplus goes to the rice-dealer, who has also come to

the spot with his boats; so that at the end of the season the cultivator returns home with his own boat laden with dhan and his pocket well replenished.

Agricultural labor.

Ryots who are well-to-do in life (and there are very few here who are not) do not cultivate land with their own hands, but use hired labor.

Agricultural servants are generally employed from Jyet (June) to Bhadra (August—September), when the cultivating season is over, as after transplantation to the time of gathering the crop it is hardly necessary to take any care of the crop. The pay is Rs. 18 or 20 for the season, plus food three times a day. People from the north of the Bhairab, who have already done with their own cultivation before this period, come down and engage themselves as laborers. The working hours are from morning to 2 p.m. This is the *cultivating* laborer; the transplanting laborer, or *roa krishan*, is different. These come in gangs of 5, 10 or 12 from the north-west of Furreedpore and the northern parts of this district in the months of August and September, and engage themselves at three men per rupee, or at Rs. 10 a month. A gang of seven or eight men can plant about 3 beegahs of land per day. The task is rather troublesome, as the soil being then under water and full of puddle the damp eats up the soles of the laborer's feet, which have to be protected with a coating of blue vitriol mixed up with catechu water. The labor begins at early dawn and ends at night-fall, with intervals for the meals, which the owner of the field provides. The method of planting by means of the *gochea*, a wooden peg of which I shall have occasion to make mention hereafter, is also practised in lands which do not require ploughing.

The third and last process is the harvesting, when grain-cutters (*dawals*) from the north and west flock to these parts, after they have gathered their own crops at home. The share is four-fifths for the owner and one-fifth for the *dawals*, who not only cut the paddy but thrash out the grain before they are entitled to their share.

Even some of those who cultivate the soil and transplant with their hand do not undertake to apply the scythe to their paddy fields. This custom is notably prevalent among the Podes, a peculiar class of Hindus who inhabit some of the Rampal villages, and enjoy the reputation of being very good cultivators of the soil. Thus it will be seen that the ryot of the south is not a laborer with his own hands, but that he is in sufficiently comfortable circumstances to hire out labor.

Other modes of remuneration.

There are some other modes of remunerating agricultural labor in kind which deserve notice. In the western parts of the sub-division, where there are no other harvests but the *amun* and the *katean* or dry weather crops, such as *sarsu*, *kalai*, and *musuri*, we meet with cultivators coming down from the north in October with their cattle and ploughs in boats, for sowing the mustard seed.

The lands which principally stand on river banks are rented at 4 annas per standard beegah, they being incapable of producing any other crop, as no *aus* grows here. Here also the cultivator does not work with his own hands, but has assistants who share with him the produce. The cattle and ploughs being his, he supplies his men with food and seed-grain, and pays the rent, the shares being two parts to the cultivator, and one part to his assistants. If any of the latter brings ploughs and bullocks of his own he takes one-third of the whole.

Hired cattle.

Plough cattle are hired out on condition of payment of dhan in return. The season is from Jyet to Bhadra, the rate being 7 to 11 maunds for the whole term. In the Sunderbuns cattle are hired at Rs. 8 per pair for the three months of the cultivating season.

SECTION II.

FOOD-GRAINS, VEGETABLES, ETC.

Rice.

The total rice-producing area in Baghat is 118,930 acres,* and of these 8,130 acres are cultivated with *boro* and *raida*, 15,015 acres with *aus*, and 95,785 acres with *amun*.

The *boro* crop.

The *boro* is confined to the *bils* and marshy tracts situated to the north of the river Bhairab. It is the earliest crop of the Bengali year, being sown in October and November, transplanted in December, and reaped in April and May. As soon as the inundation water has subsided, a seed-bed within reach of the tidal waters is chosen and carefully surrounded with a small ridge of earth, in order to prevent the grain being washed away. In the meantime the ryot goes on clearing the soil which is ultimately to receive the plant, and in doing this he has only to remove the weeds and *dhaps*, which then float down the creeks and rivers with the ebb tide in heavy masses. Inland, these *dhaps* are heaped on the sides of the field, and serve to form a surrounding ridge on which the *belati kumra*, or sweet gourd sown by the ryot, finds a luxuriant spot to trail over. The soil which, already laden with sedimentary deposits, is soft in its nature, is then stirred up with feet, and the seedlings which have been intermediately transplanted in a low bed are finally stuck into it without any other sort of preparation being necessary for the purpose. I have omitted to mention that the *raida* crop is raised along with *boro*, the seed of both species being mixed up before it is scattered on the beds in the proportion of 20 parts to 4.

The *raida*.

In May and June the *boro* dhan ripens, and is fit for the sickle, while the leaves of the *raida* plant, which is then but half-grown, become shorn in the process without, however, suffering any other injury. The seed-grain for sowing an acre of land is 37 seers valued at Rs. 1-5, while the produce is 33 maunds per acre, obtained without undergoing any other expense.

Sometimes *boro* is cultivated in land adapted to the *amun* crop, when two or three light ploughings are necessary before the plant is stuck into the soil, The grain of the *boro* dhan is coarse, not easily digested, but is cheaper than other kinds of paddy, although when husked it yields a less quantity of rice than the *amun*.

The *boro* as well as the *raida* grow more plentifully in the Mollahat thannah (which has not been subjected to inquiry), as the land there, being part of a great morass country, is well adapted to the crop.

Katari dhan.

A supplementary but insignificant crop is reaped from the stalks which spring up from the roots of the *boro* after the cutting of the main harvest. This is called the *katari* (কাটারি) dhan, and is generally collected by the poorer classes with or without the consent of the owner of the field. If the yield is substantial, the owner keeps it all himself.

Aus.

The next crop is the *aus*, which in a soil saturated with so much moisture does not yield as adequate a return here as it does in the northern parts; and is not therefore much cultivated, being confined to spots situated above the reach of tidal waters, near homesteads and on the banks of khals. In thannah Rampal 739 acres, situated mostly in the decennially-settled estates which lie to the north-west, are cultivated with this crop; while in Morrellgunge, which has a large tract of country facing the Baleswar, the area under this crop is 2,350 acres.

This dhan is sown broadcast in fields in the months of March and April and reaped in July and August. Of all food-crops it takes the

* Appendix I, Statistical Return D (a), Agriculture.

least time to arrive at maturity, being capable of feeling the scythe within 60 days of its sowing; and, as an intervening crop, is a great help to the ryot, affording him an additional supply of food before the *amun* of the past year is exhausted. The average produce per acre is 18 maunds, while the cost of seed-grain is about a rupee.

The *raida*, of which I have made mention already when speaking of the *boro* crop, is the third harvest of the ryot living in the *bil* country, and is gathered in September and October. It thus takes nearly a year to arrive at maturity, the produce being about 12 maunds per acre. Its cultivation, along with that of the *boro*, is confined to the marshy tracts of the Nurrail, Khoolna, and Baghat sub-divisions, and does not extend south of the river Bhairab.

Raida a floating paddy.

One characteristic of the *raida* deserves some mention here. It is a floating paddy, the stalks of which twist and interweave together into masses called *dhaps*, which are driven by the action of the wind from one field to another. These *dhaps* and their produce become the property of the owner of the field, who has prevented their further migration by affixing them to his soil by means of a bamboo.

None of these varieties of dhan, *boro*, *aus*, or *raida* can be offered up in the poojahs of the Hindoos, nor are they used as food by widows of the respectable classes.*

The *kurmani* dhan.

An early species of *amun* known as the *kurmani* dhan is produced in the *bils* north of Bhagat. The soil is not subjected to ploughing, but the jungle is cleared with the spade and the seed is sown broadcast. The dhan is ripe in Assin, when it is reaped. The area covered by it is comparatively small. The seed required is 15 seers to a beegah and the produce 6 maunds.

The great *amun* crop.

The great staple of the country being the *amun*, which yields the largest outturn and supplies food for all classes, leaving a good surplus for exports, a description of the modes and results of its cultivation may not be out of place.

The season of sowing and transplanting may be said to extend over five months from May to October. In May seedlings† for the lowland *amun* are raised, and when they have attained sufficient growth, are transplanted in July into spots beyond the reach of the salt-laden current of the Bhola river.

There are three seasons, called *yogas*, for raising the smaller seedlings *(pato)* required for the higher *(denga)* lands; two in Assar (June—July) and one in Sraban (August). If the *yoga* falls at the time of the new moon, the dhan is soaked on the second day and spread over the nurseries on the 6th, 7th, or 8th day of the moon, after the tides have receded from the levels on which they stand. So great is the attention paid to this matter that the cultvator goes on enquiring three months before when the *yoga* or proper season will arrive that he may not miss it. Of these three intervals the second is the best, as the rains have then fallen and rendered the water sweet, which is not the case at the time of the first *yoga*. The third is generally taken advantage of by those who, having no bullocks of their own, have to depend for assistance on others. In three days the seeds take root, if not injured by crabs, washed away by the current, or picked up by birds; and in about a month the seedlings have obtained their full growth. From

* The origin of these grains is ascribed to Vishwamitra, the Trismegistus of India, who is said to have first introduced these crops; and the unwillingness of the exclusive Hindoo to accept of anything foreign appears to have been at work in rendering them impure in his estimation.

† Called *gachta*, from big stem and long leaves.

the 15th Sraban to the first week of Assin transplanting goes on much later in season than I have known in other parts of the country. In the earlier transplantations the shrubs are wider apart, as they require a freer scope to grow and are expected to yield a larger return, the distance from one shrub to another being usually a foot and a half. No weeding is necessary as no extraneous vegetation grows at the roots. If the heavy dews throw the plant down, new stalks spring up from the joints which touch the ground, which also yield dhan. The paddy shoots out into ear from the 1st of Kartick (mid-October) to the 8th of Agran* (20th November), after which the season is late and the produce less than an average crop. The harvest is gathered in December and January, and the produce is about 11 maunds 15 seers per standard beegah.

The most favorable conditions† for the gathering of a plentiful harvest are continued showers in Sraban, the usual inundation in Bhadra, after which the waters begin gradually to recede in Assin, and the absence of cyclones in Kartick. The absence of rain does not much affect the lowlands in these parts, as they are mostly within reach of the tidal waters, a favorable circumstance which renders scarcity from droughts comparatively unknown.

The *amun* is divided into two generic species; *chotan* and *boran*. The first is the upland rice which is harvested early and the second is the lowland paddy which is gathered the latest in the season. The *chotan* produces the finer kinds of rice, the *sirati*‡ variety being the most in demand as a delicate rice, the cultivation of which has increased within the last 20 years. *The sirati, naldog, ghunshi, dak shoel, chinael*, are *chotan* species which supply the rice mostly consumed by the higher and middle classes, and which is known to tradesmen under the cognomen of *balam*.

The *chotan* and *boran* paddy.

Balam.

The *boran amun* paddy which produces the coarser kinds of rice, and the *aus, boro*, and *raida*, where locally grown are consumed by the lower and poorer classes and supply therefore the staple food of the country.

A list of the names of different species of paddy grown in the subdivision is herewith annexed.

The food grains besides rice are the pulses, viz., *musuri, motar, kalai, khesari*, and black *moogh*, which cover an area of 2,090 acres only. No *arhar* or gram grows here, and of those enumerated above the black *moong* and *musuri* are more resorted to than the others. The soil is not well adapted to the growth of these winter crops.

Other food-grains.

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*This is founded on a agricultural proverb :—

সমেত কার্ত্তিক অগ্রহায়ণের আট।
যে যা ফলায় সে যায় টাট॥

That is from 1st Kartik to 8th Agran, if the ears do not burst forth the produce is nothing. Another version—

কার্ত্তিকের আট অগ্রহায়ণের তের।
ইহার মধ্যে যত পার॥

which extends the limit to 13th of Agran.

† This is aptly described in the following meteorological proverb :—

কাকড়া ভাসে সিংহ ডোবে কন্যা কাদে কাদ।
বিষা বাতাসে ভিজে তুলা, কোথা খোব ধান॥

Heavy rains in the month of Sraban (Cancer), floods in Bhadra (Leo), which gradually subside in Assin (Virgin), and light rains at Kartik (Libra) unaccompanied by cyclones, contribute to a bumper crop.

‡ Most probably introduced from Sylhet (Srihatta), where the finer species of rice abound.

Vegetables.

Of the vegetables, which occupy an area of 375 acres, the *man kachu* (*arum* root) is the most important as supplying the place of the potato, of which it is rather a bad substitute, for the mild poison it contains affects the palate even in the cooked state.

Rhizom.

In Agran (November—December) the seed plants are purchased at Fultala Keshabpore, and Faquirhat at the rate of two to four annas for every four score, brought home, and planted in cultivated plots on the banks of rivers situated beyond inundation mark. The soil is loosened and stirred up at the roots in June; and in August, when the *rhizom* has attained full growth, up-rooting begins and lasts till November. Each root is sold for one anna, and enters into food either boiled with rice or cooked in curries. The plots sown seldom exceed one cottah (one-sixtieth of an acre), of which the average yield is about 55 roots.

Oil-seeds.

The oil-seeds grown in Baghat are the mustard and the *til* (sessamum). No linseed is cultivated here.

Tobacco.

Excepting in the western parts of the thannah, where a few patches are sown with tobacco, the cultivation of this leaf may be said to be almost unknown, although the consumption of the imported article, as attested by the large sales effected at the *hâts*, must be immense.

Dye-wood.

A dye-wood locally named *bokom*, which gives coloring matter to the red powder used in the *dol jatra* of the Hindoos, is grown in Baghat. The trees are about four inches in diameter and grow to a height of 15 to 20 feet.

Condiments.

A small area comprising 87 acres is cultivated in the vicinity of Baghat with coriander, *randhuni*, black cummin, turmeric, and ginger.

Garden fruits.

About 2,361 acres of land near ryots' houses are taken up with mango, jack, and other fruit trees, as well as bamboo, *tal*, and date trees mixed up promiscuously.

Fibres.

An insignificant quantity of jute is raised here in about 550 acres of land, and estimating the produce at 12 maunds per acre, the annual yield would be about 6,600 maunds, which fall short by 7,413 maunds of the total consumption at half a maund per house, of which there are 28,326 in this thannah. The varieties grown here are the *dese* and *dhakae kosta* and the *mechat*.

Cotton.

A small area of 31 acres is cultivated with cotton in small plots near homesteads. In Assin (October) the soil is ploughed up five or six times, and in November the seed is sown along with a little mustared, pulse, or *randhuni*. In January, when the cotton is in flower, the extra crop is gathered and the soil is subjected to the spade. The pods ripen in May, when the picking begins.

The cotton thus obtained is cleared by a rude machine. One beegah (one-third of an acre) yields about $1\frac{1}{2}$ maunds of uncleaned cotton, which when divested of seeds is equivalent to $15\frac{1}{2}$ seers, which at Rs. 16 per maund is worth Rs. 6-4. The rent paid for such lands is Rs. 2-4 to Rs. 3-12 per acre.

Pân.

Although in the south the pân leaf is not so largely cultivated as on the banks of the Bhairab above Khoolna, still the gardens here are more numerous than in Jhenidah and Magurah; the total area covered by them being 126 acres.

The mode of cultivation has been described in my last report, and I have to add here only that the average area of a pân garden is about 6 cottahs (or $\frac{1}{10}$th of an acre), and the number of gardens is 1,178. The rent per

standard beegah ($\frac{1}{3}$ of an acre) is from Rs. 2-4 to Rs. 3-10. Unlike the north, there are two seasons of planting, the first in July and August and the second in November. The season of gathering the leaves is the next July. The average yield of a 6-cottah garden is about Rs. 30 worth of leaves, which, after deducting the expenses, about Rs. 10, leaves the owner a profit of Rs. 20 per annum.

The varieties of the leaf are—

1. The *Dhaldog* (white stem).
2. The *Jhalpán* (pungent leaf used by boatmen).
3. The *Kajla* (stem blackish red).
4. The *Sachi* (the scented).
5. The *Koroe* (long and slender leaf, less scented than the *Sachi*).

The *Dhaldog* variety being the most commonly grown.

A pân garden (*boroz*) lasts 8 or 9 years. It is much infested by gnats, even during the day.

Species of Paddy grown in Sub-Division Bagirhat (Mollahat Thannah excepted), District Jessore.

Name.	Color.	Size.	Remarks.
1.—*Báran Amun.*			
Loná Karchi	White	Coarse, thick.	
Dheyira Karchi	Ditto	Ditto	Has a tail.
Paera Jal...	Ditto	Long, fine.	
Chhatra Bhog	Ditto	Short.	
Jakan Jhárá	Red	Coarse, thick.	
Jámáe Lárú	Ditto	Ditto	Has a short tail.
Báer Bhog	White	Thick.	
Dháirá Kasturi	White with a black spot at the stem.	Short, flat.	
Bendá Kasturi	Ditto ditto ...	Short & very coarse.	
Lokmá	Yellow	Coarse.	
Biringi	White	Ditto...	Has a tail.
Ránga Gotá	Red	Ditto.	
Chiná Khershail	Black	Ditto...	Has a short tail.
Dúdh Lúchi	White	Short and fine ...	Has a tail and the rice is soft.
Dudh Motán	Ditto	Coarse.	
Latá Monahar	Ditto	Long and thin.	
Páriját	Red	Thin.	
Khunni	Black	Coarse	Has a short tail.
Ban Kumrá	White	Ditto.	
Tepa Chhatra Bhog	Ditto	Short.	
Ráuti	Ditto	Coarse.	
Nárá Kumrá	Ditto	Ditto.	
Tulá Shail	Ditto	Ditto...	Has a tail.
Haridrá Katall	Red	Ditto	Has a short tail.
Sharna Latá	Ditto	Thin and fine ...	Ditto.
Beti Bálám	White	Ditto.	
Panbot	Ditto	Coarse.	
Murátí	Ditto	Short.	
Ghrita Sháil	Ditto	Fine	Has a sweet smell.
Chálati	Ditto	Coarse.	
Kalá Mochá	Red	Ditto.	
Kuni buri...	White and has a black spot at the end.	Very short.	
Boerá Káti	Yellow	Long, coarse ...	Has a tail.
Juári Kati	White	Coarse	Ditto.
Dhaira Kati	Ditto	Flat and coarse.	
Har Gojá	Ditto	Long and fine ...	Ditto.
Ghárbhánga	Ditto	Very coarse.	
Gopal Bhog	Ditto	Short.	
Dáud Khání	Ditto	Fine	Has a sweet smell in the rice.
Khajur Kandi	White	Very short	Grown extensively.
Páruyi Jál	Ditto	Fine.	
Khágoyi Párr	Ditto	Coarse	Has a tail.
Kál Meghi	Black	Short.	
Madhu Mugor	White	Very coarse.	
Shaik Mugor	Black	Very fine	Has a short tail.
Maghúl Múl	Red	Coarse	Ditto.
Khershálll...	Black	Very coarse... ...	Has a long tail.
Lakhiráj	White and has black spot at the end.	Short.	
Kumrá Goir	White	Coarse.	
Bet Lowá...	Ditto	Short.	
Kadyá Mow	Ditto	Long and fat.	
Berindi	Black	Fat.	
Mat Chálí...	Ditto	Long and fat.	
Ghunsi	White	Fat and short.	
Kalá Dámá	Ditto	Ditto.	
Aspol	Ditto	Long.	
Malsh dal...	Ditto	Long and thin.	
Nugli	Red	Fat	Has a tail.
Gendá Kasturi	White	Ditto.	
Dál Kachu	Red	Ditto.	
Kálá Mánick	Black	Fat, coarse	Ditto.
Baerlejá	Red	Ditto	Ditto.
Ránga Motán	Ditto	Ditto.	

Species of Paddy grown in Sub-Division Bagirhat (Mollahat Thannah excepted), District Jessore.—(Continued).

Name.	Color.	Size.	Remarks.
Chotán Amun.			
Shádá Lunjuri	White	Thick.	
Kálá Lunjuri	Black	Ditto.	
Chhiratti	White	Long and fine.	
Kenduá	Red	Thick.	
Dud Kalam	White	Short and fine ...	Has sweet smell in the rice.
Durgá Bhog	White and has a black spot at the end.	Fine and long.	
Nal Dog	White	Ditto.	
Chinái	Red	Short and fine.	
Bádshá Bhog	White	Short	Very soft and has a sweet smell.
Machhrángá	Ditto	Middling.	
Kátmál	Ditto	Ditto.	
Dák Sháil	Ditto	Short.	
Shita Bhog	Ditto	Long.	
Rándhuni Págol	Ditto	Fine and long ...	Has a sweet smell and is quickly boiled.
Khunchi	Red	Coarse	Has a short tail.
Jhúr	Ditto	Ditto.	
Káli Jira	White with a black spot at the end.	Very short.	
Bágún Bichi	White	Ditto.	
Jatá Mándrá	Ditto	Coarse.	
Jhinga Shail	Ditto	Long.	
Nárá Khershail	Ditto	Ditto.	
Rakta Jailá	Red	Coarse.	
Dud Bhog	White	Ditto.	
Bokra	Ditto	Ditto.	
Dud Chhiratti	Ditto	Ditto.	
Aus Dhan.			
Kálkuchi	Black	Thick	Has a tail.
Paránghi	White	Coarse.	
Mádári	Black	Ditto.	
Kunja Latá	White	Fine.	
Cháuli	Ditto	Fine and long.	
Alápsi	Black	Coarse.	
Shátiyá	White	Middling.	
Sholoyi	Ditto	Thin.	
Benáful	Ditto	Ditto.	
Surya Mani	Red has a black spot at the end.	Fine.	
Lakhi Kajole	Blackish	Short.	
Boro Dhan.			
Káli Boro...	Black	Coarse.	
Kayi Juri...	Ditto	Ditto.	
Nargote	Blackish	Ditto.	
Shanárgáiyá Boro	Reddish	Ditto.	
Tál Jaolá	White	Ditto.	
Ráidá Dhan.			
Pigri	....	....	
Dheki	....	....	

SECTION III.

THE BETEL-NUT.

Its importance.

THE article most important after rice is the (*supari*) areca or betel-nut, which is grown extensively in Baghat, covering an area of 3,830 acres. It is by no means to be supposed that all this land is exclusively devoted to the growth of this fruit, but the cocoa and date palms also find a place in the betel-nut gardens. Over and above this, every tenement put down as *bastu* or homestead land, has a group of *suparies* around it; so that the above figures do not correctly represent the *entire* area covered by the areca.

The gardens.

In fact, areca is the chief characteristic of a Baghat village, indeed of all villages situated on the Bhairab. It greets the traveller from a distance, standing erect in a forest of trees of the same order, while the imbrowned nuts hang in bunches under the crown leaves like the volutes of a Corinthian pillar. Every ryot invariably surrounds his tenement with a dense cluster of areca, which, while protecting his house from the fierce north-wester, serves to shut out the rays of the sun for the greater part of the day. Sometimes an avenue gracefully lined with this palm points out the spot occupied by the lowly hut where otherwise any other sign of human habitation would not be easily discernible. In short, the villages here may not be inaptly described as extensive areca groves, dotted with ryots' dwellings, impervious to the view from outside.

Supari cultivation. The seedlings.

In November and December the gardener clears a small patch near his homestead, and buries entire ripe *suparies* with the husk on, about an inch into the soil. The plant shoots forth in April and May after the ground has been soaked by the early showers. It is kept on for two years in this nursery until the wood breaks out above the roots.

Transplanting.

During this period the ryot selects and prepares the garden round and about his homestead which is ultimately to receive plants. The soil is raised by the excavation of intermediate drains so as to be above inundation mark. In April he converts the whole spot into a plantain shrubbery, and beneath its shade he plants the young areca in rows 8 cubits apart. In the course of four or five years, when the plantain trees have disappeared and when this row has begun to bear fruit, a second set of young areca is planted in the intervening space in the same line, thus reducing the distance between each plant to four cubits. The process is repeated until the interval between the trees is further reduced to two cubits, and as the plants become old and incapable of bearing fruit they are replaced by others in the same line.*

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* আটা, চাইরে, দুয়া,

কুড়াকে, হাজার গুয়া,

By planting 8, 4, 2 cubits apart you have thousand areca trees in a beegah. A second formula in regard to distance of one plant from another is

নারিকেল আঠা (আট হাত)

গুয়া কাঠা (পাঁচ হাত)

i.e., cocoanuts should be planted 8 cubits apart and betel-nuts 5. But from what I have myself seen I incline to the opinion that it is more to the ryot's advantage to plant betel nut trees 8 cubits a part as density only tends to diminish the produce.

In the November the garden is subjected to a hoeing in order to allow the dew to touch the roots, which if visible above the soil are to be cropped and covered with earth.*

Species.

There are two species of areca—(1) *taralá* (তরল) in which the leaf joints are widespread, as in the bamboo of the same name; and (2) the *gittia* (গিটিয়া) or *girátiá* (গিরাটিয়া) or knotty. The first bears fruit earlier than the second. There are no barren trees as among date plants.

Fruits.

The trees become fruit-bearing in their 5th year, as already said, and if the roots of the young tree are visible above the soil, the trees bear fruit still earlier. The first year's flowers prove abortive, as they wither and dry up without bearing any fruit; but from the next year there is no failure. The flowers sprout forth in February and March, the nut is in embryo in May, and begins to ripen in October, and the season continues up to December, just as the *amun* becomes ripe. Each tree bears the nut in three bunches, of which two only yield good fruit.

I have counted as many as five bunches in a tree, but there are not many trees in a garden bearing that number.

Average produce.

The average produce of each tree is about 264 nuts, equal to a score of local measure.† The bazar price of a score of nuts in season varies between 5 and 6 pice, which represents the money value of the average produce of each tree per annum. An acre of land contains about 1,200 trees of which about half are fruit-bearing, and, counting the average profit per tree at 1 anna, after making deductions for home consumption and expense of collection, it would yield about Rs. 37-8 per annum. The area covered with betel-nuts is 3,830 acres, of which the estimated produce is worth Rs. 1,43,625, or Rs. 5 per house. The full growth of a tree is up to its 20th year, when it goes by the name of *dekrá* (or young tree), after which the fruits decrease in number as the crest becomes gradually withered on account of age. The tree, which after this period is called *kakni* (or old) continues to bear fruit up to the 45th year, after which it languishes and ceases to bear fruit any longer. So that the fruit-bearing season of each tree extends over 40 years.

Fruit how collected.

The fruits are gathered by boys called *paronis* (collectors) of 10 or 11 years of age, who climb up the trees with an ease attained only by constant habit. If the garden is dense the boys swing like monkeys from one tree to another. The wages are 8 annas per thousand scores, or if payment is made in kind, 11 or 12 nuts are given for each pair of trees.

How sold.

The fruits are taken to the nearest market by the owners themselves in boats, where they are bought up by *paikars*, who again carry them to wholesale dealers who keep up manufactories for husking them.

Husking.

This process is of two kinds, viz:—(1) the dry process, in which the ripe nuts are separated from the unripe, thrown into heaps and dried with the husk on. In April (Bysack) the husk is taken off and the nut sold at Rs. 5 per maund. (2) the slicing

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* A common saying points out the process here indicated.

শুপারি কাটি, নারিকেল মাটি,
কিবা ফলের পরিপাটি।

How abundant is the produce if the roots of the *supari* are cropped and fresh earth added to the root of the cocoanut.

† 10, 11 or 12 nuts = 1 gha.
21 or 22 ghas = 1 score or kuri.
50 kuries = 1 thousand.

process, wherein the bark while in an unripe state is sliced off. The bare nuts are then thrown into large baskets, trodden upon by four or five men, then washed, after which they take a brownish tint, and are then dried for six days on mats. The nuts are now separated into three classes, viz :—

(1).—The *kekri* (কেকরী), small and black because unripe, is throw away as useless, one-half or three-fourths of a seer in the maund is lost in this way.

(2).—*Jangal* (জঙ্গল), from which the second coat or *aril* which surrounds the nut cannot be separated. This stuff is sold at half price to Shabazpoor *beparies*.

(3). The *jil* (জিল), which is the best quality, being much prized by the Maghs, who carry away large quantities of it from Nalchiti, a mart in the Backergunge district.

Another process of husking the *supari* is to press the husk into a sharp pointed spike with the hand, when the bark comes off with an ease only attainable by persons habituated to the trade. This method is much in use in the western parts of Baghat.

Areca plantations.

Of all the areca plantations I have seen, that known as the Hazrâ's garden, situated at the confluence of the Bhairab with the Baleswar and extending over more than five acres of land is the most note worthy. It is of 25 years' standing and has arrived at a stage of maturity and productiveness which places its owners in a state of substantial comfort. It is a well established fact that both the areca and cocoanut flourish most on the banks of the Baleswar and the country adjoining; and tradition points out to Pran Mandal and Boree Sardar as the first introducers of the plants into these parts. The date about which these men flourished (1194 B S., or 1787-88 A.D.) was a period of scarcity, thus pointing out the fact that in times of distress emigration has gone on for the purpose of discovering and cultivating new food-producing area.

The wood.

The wood of the areca is applied to a variety of purposes, for like the bamboo it serves for posts, cross-beams in houses, and when divided into slender stems it is used in framework for the support of mat walls in houses and of roofs in boats.

The leaves.

The cast-off leaves doubled up and hung on a bamboo serve as screens at the entrance of a ryot's house, in order to protect the Mahomedan housewife from the stranger's gaze; while the filmy or lower part of the leaf, which encases the stem of the tree, doubled and sewn up serves innumerable purposes for the custody of articles constantly required in a household or in boats. These leaves are also of material use as fuel. The fibre which surrounds the fruit, though adapted for the manufacture of paper, is thrown away.

THE COCOANUT.

Next to the areca, but much more prized as an article of food, is the cocoanut, the cultivation of which is carried on extensively.

The plant.

The ripe fruit of Bysack (May) when brown is taken down and placed in some unfrequented corner of the house. In Assar (June) as soon as the plant shoots from the kernel through the endocarp it is taken out and stuck half deep in some shaded soil in the garden.

In May next year it is transplanted 16 cubits apart one from another under cover of the plantain tree.* Earth is renewed at the roots every year,

* A superstitious notion most prevalent here prescribes the planting of cocoanuts through the hands of old men, otherwise it is said they neither bear good fruit nor last long.

and in September the head and trunk are cleared of vermin and the half dead lower leaves. The tree bears fruit in 5 years in rich soils, and in 7 or 8 years in others. It lasts 50 years and bears usually 40 to 50 fruits annually, some yielding a hundred; the average being about 45 fruits sold for 1 rupee.

Avorage produce.

Species. There are three species of the cocoanut, viz:—

(1) The *jat*, the green plant.
(2) *Lal sanbanea* or *rangra*, the red plant.
(3) The *dudh sanbanea*, the whitish plant.

Like the *supari* tree, with which it is intermixed in the gardens, it delights to grow in a rich damp soil, and flourishes most in villages verging on the Baleswar.

The trade in cocoanuts is extensive. Dealers, who come in boats, buy up large supplies of them for export to Calcutta and to the districts situated to the north. Besides the large number of fruits sold for local consumption, the value of those annually exported is estimated at Rs. 6,418. The cocoa season is a most favorable one for the ready sale of the fruit, as it comes to market about the time of the *Durga Pooja*, when an extensive demand for it exists. The cocoa bears all round the year, but the fruits are more plentiful in August and September. The tree is in flower in October and in April.

The largest marts for the sale of cocoanuts are Baghat, Fakirhat, Morrellgunge, and Taleswar.

The largest cocoa garden I have seen is that at Rainda, a Sunderbun lot situated at 22° 20′ north latitude and 90° of east longitude, in which about 100 acres (300 beegahs) are covered with the plant in various stages of growth.

The Rainda garden.

During the cocoa season the fruit is freely interchanged as a present,* and its white flesh is in great request amongst Bengalis at all times as a delicacy, and is eaten in various ways, raw and cooked. Almost the whole of the home made confectionery which the Bengali housewife, high or low, prepares with her own hands for the entertainment of her husband's friends, or as a substantial accompaniment to the presents annually sent to the son-in-law, contains cocoanut flesh in some shape or other. Amongst the middle classes delicacy of hand in preparing such sweetmeats or in carving cocoanut flowers is considered as a very desirable accomplishment in the fair sex, and among those who pretend to good-breeding such an acquirement is not at all rare. The milk of the young fruit is a delectable cooling drink, and a most grateful substitute for the *sherbet*.

The fruit prized as a delicacy.

The oil is not exported, but is locally consumed with food excepting in fish curries. The flesh of the fruit is sliced, dried, and made over to the oil presser, who charges two pice per seer as his wages; ten fruits, which cost four annas, yield one seer of oil. It is also burnt in the candle and is used for embellishing the hair, as well as for anointing the body before bath.

Cocoanut oil.

The wood of the cocoa serves as cross beams in houses, and the leaves are used as fuel. A bunch of the petioles or midribs divested of the blades usually serves as a broomstick in households.

The wood.

দাভার নারিকেল, বখিলের বাঁশ।

* The more cocoanuts are brought down and given away the larger is the produce; but as regards bamboos the miser has a most flourishing clump.

The most common use made of the shell is in converting it to a smoking pipe, of which there are two or three in every house. When equally divided it serves as a liquid measure, as a ladle when fitted with a bamboo handle, as a salt cellar, or as a cover to waterpots.

The shell.

The date tree, of which I took occasion to treat at length in my report on the Jhenidah and Magurah sub-divisions, does not occupy a prominent place in the agricultural economy of the south. It is said that Shaik Farid, of whom mention has been already made, introduced it here, although the soil is not so well adapted to its growth. It flourishes more in the west, where the land is higher, and within the last 40 years its cultivation is thought to have increased fourfold. The sap is boiled into goor, which is sold in the manufactories at Fakirhat and Raenabad, which draw their supplies also from places further north-west. There are small factories at Jatrapoor and Taleswar also, the process of refining at all these places being the same as pursued at Rarikali, described in my last report.* The exuberant moisture in the soil and the nearness of the sea render the sap less sweet and a little saltish to the taste. The yield is less, as about 12 seers of sap are boiled down to one seer of goor while in the north 10 seers produce one seer of goor. This proportion increases as we descend towards the Baleswar, where 16 seers of sap yield one seer of goor.

The date tree.

The *tal* (*Borassus flabelliformis*) has here a luxuriant growth of itself, for no care is bestowed on its culture. The seeds thrown away after the juice has been sucked in August and September germinate and grow up into trees in time. The soft kernel of the unripe fruit is eaten in the month of May as a cooling food, while the thick juice of the ripe fruit is taken either with milk or is prepared into cakes.

The *tal*.

The soft spongy substance which grows within the seed after the lapse of a month is much relished by boys.

The wood serves as beams to *puoca* buildings and as posts to mat houses. The leaves are manufactured into fans, large and small, and woven into small fancy bags. A small rude canoe called *tal donga* is scooped out of *tal* wood and is in extensive use in these parts amongst ryots.

The permanently settled estates lying within Rampal and Morellgunge need no separate description, as they partake of the characteristics of the adjoining tracts lying within Bagirhat.

CHAPTER II.

THE SUNDERBUNS.

Although the great forest known as the Sunderbuns which formerly stretched north as far as the immense inland morass has, owing to the clearances effected by man, gradually receded further down, it still presents a formidable barrier to the further progress of reclamation.

Taken as a whole, this forest country is a source of inexhaustible wealth to the people of the surrounding districts. It affords an unfailing supply of timber for the purpose of building boats and houses; of wood for fuel; of thatching leaf (*golpata*) for covering the roof; of cane which is applied to a variety of purposes; of *nal* reed for the manufacture of mats, which are in constant demand all over the country; of honey for the rich man's table; of wax for his candles; and of other substances which bounteous nature has spontaneously provided for man's use. The drought may burn up his crops,

* Page 31.

the floods wash them away, still if the ryot has a boat and an adventurous will to make a voyage south, he is easily able to provide his necessaries, and thus to remove the discomforts which pinch those who anxiously wait for his return in his upland home.

The selected tract.

Of the Sunderbun tract selected for enquiry, the northern boundary follows the irregular southern line of the permanently settled estates known as pergunnahs Selemabad, Havilee, Madhudia, and Hogla, which in themselves partake in a great measure of the nature of that country, brought gradually under cultivation before the decennial settlement. The southern boundary is an undefined and equally irregular forest line extending down to about 22° 20' north latitude. The river Baleswar which lies between the Jessore and Backergunge districts is the eastern, while the Passur which separates the Khoolna from the Baghat sub-division forms its western, boundary. Within this limit the area examined was 123,524 acres, of which 74,660 acres are at present under cultivation.

Appendix No. 2, Return E.

Appendix No. 1, Return D.

The population of the *chaks** comprised in this area is estimated from the district census registers and our enquiries at 30,180 souls, and the food-producing area being 72,784 acres, gives an average of 2·4 acres each soul.

Reclamation.

The history of agriculture in the Sunderbuns is the same as the history of its gradual reclamation. The tract verging on the Baleswar has greater attractions than the inland lots, and as we proceed further west we come across dense forests which have remained untouched on account of the absence of sweet water in the vicinity. In general, the tide of reclamation follows the course of the creeks which open themselves into the large rivers, and the reclaimed spots are almost all known by the names of the *khals* on which they are situated.

The forests.

The Sunderbuns are thick forests of the sunder ("Heritiera minor"), *Passar*, *Jir*, *Ora*, *Keorah* ("Sonneratia apetula"), *Baloe*, *Bain*, *Kuroncha*, *Geo*, *Garan*, and other wood so thickly interwoven with one another as to render the soil beneath impervious to the rays of the sun. They abound in tigers and other fierce wild beasts, as well as snakes, so as to render their exploration quite a dangerous task, beset with difficulties in all directions. Seen from a distance, they seem to hang like a dense black cloud repelling nearer approach. The only way to explore them is by means of the creeks by which their continuity is broken, and through which the reclaimer may enter into his new field of labor in boats. Even on landing he finds it difficult to tread on the soil, as the roots of the *sundri* tree send forth spear-shaped pikes, which shoot up a foot high and present a serious obstacle to the pedestrian. These pikes, however, serve to keep the bottom of the tree free of other extraneous vegetation. On the other hand, the *jir* is a forest in itself, as, like the banian, it goes on dropping shoots, which take root in the soil and form new trunks, which go on increasing every year. These and other impediments do appal the reclaimer, but with an energy and fearlessness rarely to be met with in any other part of Bengal he perseveres in his task until he turns these dense forests into smiling fields.

How cleared.

As soon as a Sunderbun grant is settled with an applicant called talukdar,† the land is apportioned by him amongst subordinate tenants called hawaladars, who undertake the clearance.

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* Sunderbun lots brought under cultivation are named *chaks*, or fields.

† For terms of these grants see the rules promulgated by the Board of Revenue on the 24th September 1853.

The talukdar advances money as *takavi*, which in some *abads* is repaid without interest in small instalments extending over a number of years. In others, where the grantee has capital and wants to see the clearance progressing rapidly, the amount thus laid out is never taken back. The *takavi* thus given varies from Rs. 100 to 300 for every 100 beegahs of jungle land.

The hawaladars then engage men in gangs, headed over by a daffadar, who is paid at the rate of Rs. 7 or 8 per month. There are two seasons in which jungle clearance is undertaken; the first begins in January and ends in March, extending over two months, the second is a brief one, from 5th November to about the same date in December, the working hours being from 7 A.M. to 5 P.M. After the morning meal *(nashta)* the explorers, armed with bill-hooks (*das*) and axes, sally forth from their boats, come back for the midday meal, after which they go out again and return before dusk. In each gang of 10 or 15 cutters there is a faquir, who presides over their safety, for he is supposed to exercise a supernatural influence over tigers and wild beasts—a hallucination of which they are sometimes wofully disabused by the clean taking off of some of their party by tigers. After the trees have been felled fire is given in March to the branches which have been lopped off, but the trunks remain on the ground until removed in the month of June by *bawalis* (wood-cutters).

The virgin soil scraped. The first seed-bed.

After the land has been thus cleared a spot is selected and paddy seed is spread on it in that month without any other process than that of scratching the virgin soil by means of a single-toothed scraper (*achra*) cut out of some twig of wood.

From the 15th July to the end of October, when the soil has been saturated and softened by rain as well as by the tidal water, transplanting from the seed-bed goes on by means of a wooden peg *(gochia)* which is driven into the soil with the left hand, while a handful of the seedlings is stuck into the hole with the right. The transplanting thus done, the explorer leaves his fields and returns home. During his absence they are watched over by men called *shikaris*, who are armed with guns, and who employ themselves in driving away wild animals and in killing them if possible. In Agran the cultivator comes once to have a view of his field in order to calculate upon the time when his crop will be fit for the scythe. In Pous (15th December) he returns again with a gang of *dawals* (grain-cutters) who flock from North Jessore, Nuddea, Furridpoor, and Pubna, and who cut away the upper half, leaving the stubble standing on the field to serve as fuel for fire and as a manuring agency in the ensuing year. These take $\frac{1}{8}$th share of the crop after treading out the corn from the sheaves. Fever and storms may prevent the planting of the first year's crop, when the cultivator returns home disappointed.

Transplanting. The peg-driving process.

In the second year the branches which have sprung up at the roots of the stumps still standing on the fields and other jungle which might have grown are cut down and fire is given in March as before. The same process of spreading seeds in a nursery cleared by means of the scraper (*achra*) is repeated and transplanting by the peg-driving system still continues. This process is carried on for nearly five years, after which the land having been thoroughly cleared admits of a plough being driven over it, although a harrow is not admissible before the tenth year on account of the roots and stumps which render the soil uneven, and which cannot be got rid of without repeated fires.

The second year.

The first dhan sown is the *ghunshee*, a species of short and flat *amun*.

Wild beasts.

During the various stages of its growth it is subject to constant ravages from wild beasts. The rhinoceros, the wild boar, buffalo, and deer injure the crop at all times from the seed-bed to its ripe state, while the monkey eats up the ears in the embryo. Flights of small birds known as *baloe* and *orra* pick out the grain in ear.

Doalis or *pattanias*.

If the area cleared which has fallen to the share of a ryot be too large for him to manage it is sub-let to others, who are either *doalis*, *i.e.*, those who having a settled home at a distance make a temporary sort of abode in the clearance, or to *pattanias*, *i.e.*, those who have no residence in the *abad*, but come to raise the crop for a year. For the first four or five years all these have to pay no rent, as the chief object is to keep the land clear of jungle.

Nal jungle.

I have omitted to mention that after the first clearance of the dense forest jungle the *nal* reed begins to spring up, and if neglected threatens to undo all the labor hitherto undergone. This new pest has therefore to be kept down with a firm and resolute hand until it is totally killed by constant and repeated uprootings. Instances are not wanting in which want of care in this respect has marred the labor of years and made clearances revert to jungle again. For, as regards forest jungle, there is an end of it when once cut down, but the case is quite different with the *nal* reed, which springs up with quadruple density after the first cutting, a fact which renders the explorer more afraid of the latter than of the former. The expenses of clearing forest jungle are estimated at Rs. 4, and of *nal* jungle at Rs. 2 per beegah.

Yield.

The yield during the first seven years is abundant, being 13½ maunds a standard beegah,* after which the fields take an average turn.

Rents.

From the fifth year rent begins to be levied, being two annas at the first, and then rising in a graduated scale to Re. 1-4 after the 15th year. Some *abads* levy no rent during the first three years only. The above rates are for *jungleboori* or *abadkari* ryots. Tenants-at-will, who have had nothing to do with the clearances, pay at Re. 1-8 per beegah at the maximum.

Dams.

As the creeks which intersect the Sunderbuns send forth their water to the large rivers, so there are numerous khals communicating with these creeks, which run far into the midst of the abads, the damming up of which is an important process in the reclamation scheme. The expenses are all borne by the talukdar, and the dams are erected in Kartik and Agran (November) in order to prevent the tides running up laden with salt water.

The method of erecting dams is somewhat peculiar, and may be here described: A quantity of *nal* and other reeds and creepers are heaped up over a bedding of twigs 8 or 9 feet long gathered from the jungle, over which a coating of earth is placed and trodden down. This compact mass is rolled up into cylinder, when it takes the appearance of the trunk of a tree. When the tide has receded, a number of these cylinders are rolled down into the bed of the khal one over the other until the dam is on a level with the bank. A sluice is, however, erected for the egress of water from inland, for which purpose the trunk of a *tal* tree is sawn asunder, scooped out, rejoined, and placed below at right angles to the dam. A stopper made of a bundle of hay serves to close up the outer mouth of this conduit when the tide sets in, which is removed at ebb in order to allow the *bil* water to run out. This process is known as the *hateabaṇdi*.

* ⅓ of an acre.

In April and May when the brackish water driven down by the rain and floods from the higher soils begins to give place to sweet water, these dams are broken up for the purpose of allowing it to run in.

Tongs or watch-towers.

So long as the cultivator does not require the services of his cattle in the *abads*, he lives on *tongs*, which are temporary sheds with a gable roof raised in the midst of the field, and built on platforms made of the *nal* reed. These temporary watch-towers are generally two-storied, the first floor, on which stands the sojourner's mud hearth, being about a man's height from the ground. In the second or uppermost story, which is six feet above the first, is his bedroom, beyond the reach of the tiger which prowls beneath. The ascent is by means of slender pieces of wood fixed horizontally to the posts at long distances which serve as steps. The total height of these sheds is about 15 feet from the ground, the thatch being made up of *gol* leaf.

Nucleus of a Sunderbun colony.

When the clearance is sufficiently advanced, and the cultivator has need of his plough and yoke, he thinks of settling down in the place. A cowshed is the first indication of this desire, and as the land begins gradually to become raised by the spread of cowdung and the refuse fodder, he surrounds it with a ditch, on the sides of which he plants the *bharanda* (castor-oil plant), the plantain, and other shrubs of rapid growth. A family house with a kitchen shed now springs up, and in this manner the nucleus of a village is formed, although from the holdings being larger than usual, and from the sparseness of the population, the houses are wider apart.

As years roll on the ryot covers his tenement with other profitable trees. The areca and cocoa are planted beneath the plantain; the date is first introduced, after which it propagates from the seed, and the *tal* shoots up of itself from the seeds thrown away by the first sojourners after the sap has been sucked from the fruit. The bamboo also finds a place in the third or fourth year, but generally it has had no footing yet, as its growth is not so rapid here. The jute, which is cultivated in very small plots adjoining the homestead, scarcely suffices for domestic use. And thus at the end of the 15th year the Sunderbun colony standing on the brink of a broad creek is a thriving village skirted by the graceful areca and cocoa in all the beauty of luxuriant growth, and a forest of plantains of gigantic size beneath which these young palms delight to flourish.

As rice cultivation after this takes an average turn, any further allusion to its modes would entail needless repetition.

The plantain.

While in the north-western parts of the district the plantain tree is treated with remarkable neglect, the Sunderbun *abads* of Jessore (especially lot Rainda situated at 22° 20′ north latitude and 90° east longitude) are conspicuous for the cultivation of this most wholesome and agreeable fruit.

There are two seasons of planting, the most favorable being the month of April, when the spring showers have fallen. Some plant also in October, but the subsequent cold weather withers the stumps. In time the single tree grows into a clump and bears fruit within 12 months. The green fruit of some species is eaten in curries as a vegetable, while the ripe fruit of the finer species fetches a good price in the market. The leaves when cut serve as dishes in the great feasts of the Hindoos, and the plantain is much consumed in their poojahs, marriages, and sradhs. The average produce of a clump is about 6 annas per annum, and it is a common saying that a ryot having a beegah of plantain need be under no anxiety for the support and clothing of himself and his family.

Jute.

The *mechat* variety of jute has been introduced in these tracts about 7 or 8 years ago. The soil is not well adapted to the *desi* or the *daccae kosta* grown in other parts. The

machat, however, flourishes well when sown and has a luxuriant growth. The fibre* extracted is about 11 feet long, and, although coarser than the finer varieties of jute, is strong and lasting. The area covered by this crop, which is in its infancy, is only 24 acres.

The *abads*.

The Baroikhali *abad* opposite Morrellgunge is about 27 years old, while Morrellgunge itself has been cleared about 23 or 24 years ago. The next *abad* (lot No. 5), Rajeswar, has been reclaimed from 1860 A.D., and Rainda, which is the present southernmost† plantation in the Baghat sub-division, has been cleared about 20 years ago.

Sugarcane.

The sugarcane, introduced about 17 or 18 years ago, is much cultivated in the Sunderbun lots and fairly promises to be a staple crop. These plantations fringe the banks of the rivers in narrow strips, such soils being the best adapted to the growth of the cane. The planting takes place in February from seed stalks brought from higher lands and the cane attains perfection in September, when it is 5 or 6 feet high and 1½ inch in diameter; it is then cut, and brought in boats to the *kerki*, or juice-extracting machine of which a sketch was given in my last report. The cane is passed through the press in four turns, the juice being collected in (*kalsis*) pots which are then transferred to the stove, which has 7 openings for the boilers and 4 mouths for fuel to be put in. Ten *kalsis* of juice, each containing 25 seers, produce a *kalsi* or *tillia* of *goor* weighing from 28 to 30 seers, which is equivalent to 9 seers of juice producing 1 seer of *goor*, a proportion which tallies very nearly with the 10 seers of date juice producing one seer of *goor* in the north.

The goor thus manufactured is sold at Morrellgunge, and is also exported to Panray's hât in the Burrisal district, whence it is ultimately carried to Eastern Bengal. The average price of each *kalsi*, containing 28 to 30 seers of *goor* is Rs. 4 to 5.

The expenses of cultivating a beegah with sugarcane are—

	Rs.	A.	P.
Draining, two men 8 days, at 4 annas each ..	2	0	0
10 ploughings, at 6 per rupee	1	8	0
Seed plants	5	0	0
Two planters for 2 days	1	0	0
Weeding and hoeing *ticca*	2	4	0
Rent per beegah	2	0	0
Total ..	13	12	0

The produce per beegah is about 10 or 12 *tillias* of *goor*, which at Rs. 5 per *tillia* (the highest rate) is Rs. 50 or 60 per beegah.

Against this has to be put down the expenses of manufacture, viz:—

	Rs.	A.	P.
Hire of cattle, sugar press, and boats for carriage ..	1	9	3
12 men for ditto, at 4 annas per diem	7	8	0
Pottery	0	11	0
Fuel	3	12	0
Oil	0	4	0
Tobacco	0	4	0
Lime (for coagulation)	0	1	0
Total ..	14	1	3

* Mr. Lightfoot, of Morrellgunge, has succeeded in extracting a very clear and silky fibre from the *machat* grown in his zemindari.

† Lot No. 7, Bogee, situated south of Rainda, has been lately given up and is now desetred.

The expenses of cultivation and manufacture being thus nearly equal, the cultivator and manufacturer generally share in the profits equally, *i.e.*, if the goor of 1 beegah of land is sold in the bazars for Rs. 60 the shares are Rs. 30 for each.

These are, however, the highest rates, for some fields are known not to yield more than 7 *tillias* per beegah, and when prices are dull the profits are low in proportion. But the sugarcane cultivation is generally understood to be a profitable one, and the workmen in the manufactories know no rest even in the night when the season is at its height.

The produce is good for 4 years, after which the land requires rest for about a similar period. The cane here cultivated is the Nora species, which appears to be very common all over the banks of the Baleswar. But the avidity shewn by the ryots in order to extend its cultivation may be taken advantage of in order to introduce a better species of the cane from foreign cuttings.

Cocoa.

The cocoa flourishes in the Sunderbuns, and although the plantations are still in their state of infancy, a promising trade in cocoanuts is carried on at Morrellgunge during the season when the fruit is ripe.

The trade in honey.

A good deal of honey is gathered in the Sunderbuns, and a profitable trade in that article is carried on by some mahajuns near Khulna. They usually advance about Rs. 200 to a party of 10 or 12 men, whom they supply also with provisions and boats. In April, when the honey is in season the party starts for either Moesa, Jhapa, or Keo-chirdea *Badas*,* and on arrival at the destined place the forest god is invoked and propitiated with offerings, after which one of the number is left in charge of the boat, while two others accompany the honey-gatherers in a *dinghee*, as these march onwards through the banks of the khal which winds itself into the forest. Of this inland party, the man who walks up by the brink of the khal is the leader of the forlorn hope, for the tiger lies in wait for him with a sure aim. A second goes round the out skirts, while the main party advance through the intervening space. As soon as they discover a honey-comb they drive away the flies by means of smoke, cut it down from the tree, and press out the honey after they have brought it to their boat. The honey is sold at 2 annas 3 pie per seer, and is exported to Calcutta along with the wax. There are two varieties of honey, viz., (1) that gathered from the flowers of the *bain* tree, and (2) that obtained from flowers of the *passur*, *geo*, &c., the last being the best. The gatherers return home in a month.

The wood-cutters or *bawalis*.

These go in boats for the purpose of cutting wood in the forests, either for fuel or for masts or for timber applicable to various purposes, especially to boat-making. From 5 to 20 boats congregate together at one place under the leadership of a guardian faquir, who affixes a *jhanta*, or flag, at the spot where the party is to work. If the faquir is a *Chanral* by caste the goddess *Kali* is worshipped; if a Mahomedan, offerings are made to his *darga* on Sundays and Fridays, which cost the wood-cutter 1 to 8 annas according to the size of his boat. After breakfast, accompanied by the faquir, the party penetrate into the forest, axe in hand, and begin felling wood right and left. No tax or duty is levied, which is considered a great convenience. The wood for masts has to be sought in the dense forest near the sea, while the other timber is to be had at all spots beyond the line of the clearances.

The eastern *bawalis* who come from Burrisal are the most courageous, and I have met them going down the Baleswar in small boats quite beyond the usual track.

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* Uncultivated wastes.

The *bawalis* are armed with guns, and each boat is palisaded with *sundari* wood, as is it not unusual for the great man-eaters in the Sunderbuns to swim to the boats, rip the *choppers* open, and carry away the inmates one by one.

OTHER TRADES.

Shells. Shells are gathered in lagoons when the tide retires by men who go in boats to pick them from the mud and bring them to Khoolna, where they are burnt in kilns and sold as lime.

The *nal* reed. The *nal* reed, from which mats are made all over eastern Jessore and western Furridpoor by a great part of the population, who find a profitable livelihood from the same, is cut and brought away from the Sunderbun forests, which afford an inexhaustible supply.

The *gol* leaf. The leaf of the *gol* tree, a species of the palm tribe, is abundant in the Sunderbun creeks, whence it is carried to Calcutta and other places for thatching the roofs of the houses of the poor.

The Sunderbun talukdar. The taluqdar of the south is a more active promoter of agricultural interests than his northern brother, as he has not only to clear the land at his own expense, but to supply his tenants with cattle, food, clothes, and houses, and thus to set them up in life, as also to provide for their safety; for those who have the comforts of a home and a bit of land to supply them with food hardly ever think of facing the dangers and privations of a forest life. The landholder who is backward in making such advances can never hope of success, and before the clearance is in an advanced state he ought never to expect an adequate return.

Influence of faquirs. The Sunderbun forests are regarded by those who frequent them as a haunted region, the abode of gnomes and demons, whose good will it is incumbent to propitiate before it should be explored either for making clearances or for wood-cutting or honey gathering, and efforts are not wanting in order to keep up this spirit of superstition alive. The great patron saint against all jungly fevers, wild animals, &c., is the mystic Gazi Saheb,* who is fabled to have marched with 700 tigers in his train, converting numbers to Mahomedanism in his way to Khundanagur near Jessore, where he married a Hindoo king's daughter, and who is now said to reign in spirit over this immense forest. In fact all those who have succeeded in leaving behind some footsteps have been clothed with supernatural powers,—Khan Jehan Ali of Havili, one of the earliest reclaimers, is still honored as a great man and an annual fair is held in commemoration of him. Baroekhali, east of Morrellgunge, occupies the spot marked in Rennell's map dated 1772 as the faquir's house, where some observances are still made† in memory of Kalachand Faquir who established himself here. The broad river which, flowing below Khoolna carries the water of the Bhairab into the Passar, is named after a faquir, Rup Shah, who is said to have opened a khal in order to effect the junction. The village in which the large Sunderbun rice mart Gourrambha stands is said to have been founded by one Paju Dewan (faquir), who expelled a demon named Goria from the place. I could multiply such instances, but any one who is acquainted with the forest country south of Jessore can bear witness to the influence exercised by faquirs in these parts.

Faquir boys. These pretensions to supernatural powers have now grown into a trade, and the offerings received from wood-cutters and others are a source of gain. Another peculiar custom which

* I have heard it said that Gazi Saheb and Sha Mukdum, whose tomb is at Bagha near Nattore, and whose cubit is the unit of land measurement in Pabna, are one and the same person.

† On the 25th Agran every year.

came to my notice during my stay in these parts deserves mention. Amongst the Mahomedans and Chanrals of Jessore, Furreedpore, and Dacca, who periodically visit the forest for wood-cutting, it is customary for parents to dedicate to the service of Gazi Saheb a son on fulfilment of some child-bearing vow or on recovery from some incurable disease. These boys, who have already begun to wear the faquir's hair at home, are in their 8th or 9th year sent down with a cock or two as an offering in *bawalis'* boats in September. The child is sent ashore in the Gazi's name, while the *bawalis* engage themselves in wood-cutting ; and if he be fortunate enough to escape the claws of the tiger, and is willing to return, he finds his way back, and in his turn sets himself up in time as a confirmed faquir.

CHAPTER III.

CATTLE.

Appendix No. 3.

The cattle return hereto appended shews that in Baghat the average number of cattle per house is 3, in Rampal 6·9, and in Morrellgunge 6·3, the general average being 5·4, which is in excess of that found for the Jhenidah and Magurah sub-divisions last year by 2·6. The average number of cattle per plough in Baghat is 6·5, in Rampal 4·4, and in Morrellgunge 5·4, giving a general average of 5·4 for all the three thannahs, which corresponds very nearly with the average found last year for Jhenidah and Magurah.

The ryots of the south are in a far better condition than those of the north, and milk, the produce of their dairies, is generally consumed as an article of daily food. Besides two working oxen for each plough, each householder has one or two cows for the purpose of supplying milk at his meals. To outside consumers this article of food is rather a rare commodity in the market, as the owners of cows think of supplying their ownselves before sending out the surplus (if any) to the market. The absence of such markets within convenient distance of their homes, and the difficulty of reaching them on foot, prevent them from sending milk out for sale, even if they were so inclined.

Buffaloes as draught cattle are quite unknown in these parts.

Grazing capacities.

There are no pastures here, and the cattle have principally to subsist on hay and the weeds growing on the brink of creeks and on marshy grass so plentiful in the north of the Bhairab. Near every homestead a patch of land extending over a beegah or two is set apart exclusively for cattle to graze upon; and this course is followed in order to keep them within sight as a safeguard against the attack of wild animals.* In the rainy season the cattle remain tied up subsisting on hay and *dohar* (lowland) grass cut and brought away from fields in boats or *tal dongas*. At the end of that season, and when the harvest has been gathered, they are let loose on the fields to graze at large. Towards the north-west milch cows are, between Agran and Jyet, made over to cultivators living on the brink of large *bils*, the milk being divided equally between the keeper and owner. Some butter is exported from here to Calcutta by *goalas*, who come from Mahakal for trading in dairy produce.

The cattle are after all a very poor-looking famished breed, much more so than in the northern parts of the district. They are subjected to great privations when they are carried to *abads* in boats with scarcely any supply of food. The kine give less milk and the bullocks are weak and short-lived. This is caused by the damp soil and scanty food on which they have to subsist.

* The writer was quite close when an instance occurred in which a cow was killed by a tiger in one of the lowermost Sunderbun settlements.

Carts are nearly unknown and are not needed, as all the carriage and transport are done through water.

Cattle markets.

There are only two cattle markets in the sub-division, one at Shuk Deb Roy's hât and another at Chitalmari in the north, where the best cattle are to be had. The cattle sales at Faquirhat, Gourrambha, and Morrellgunge are inconsiderable.

Cattle thefts.

Cattle thefts are not at all common here, but at Morrellgunge a few cases were lately reported, in which the offenders were detected and punished.

Cattle how saved in inundations.

Floods occasion the greatest distress to cattle; as there being no high lands in the vicinity to which they could be removed on such an emergency, it is almost a hopeless task for the ryot to save them. In the morass country, however, the common expedient is to put them over *dhaps* or compact masses of floating water weeds and grass, strong enough to bear the weight of the animals. These are spread over with a bedding of the *nal* reed in order to prevent their feet slipping down. Then as long as the inundation lasts these animals continue on these floating patches, and are daily provided with food by the owners. Colonel Gastrell makes mention of these floatings islands as existing in the swamps of Backergunge, in page 21 of his report.

CHAPTER IV.

RENTS AND PRODUCE.

Appendix No 4.

Tables E 1 and D 3, herewith appended, give the prevailing rates of rent and the average produce. As has been already stated the Sunderbun rents are lower, while in the permanently settled parts the rates are higher. Of the average produce of each crop I have already spoken in its place, and it is only necessary to allude to it here in general terms. The ordinary produce of *boro* is 11 maunds, of *raida* 4 maunds, of *aus* 6 maunds, and of *amun* 13 maunds per standard beegah ($\frac{1}{3}$ of an acre). In forest cleared land the yield is one-fourth, sometimes half, times greater than that of ordinary lands.

Instalments of rent.

It is a noteworthy fact that here rents are generally collected at seasons when the ryot, having harvested some crop or other or replenished his pocket in other ways, feels himself at ease to satisfy the tahsildar's demands. In the *boro** country, north of the Bhairab, the first instalment is eight annas and in some instances twelve annas of the whole rent, which is paid in April and May. In July, August, and September, when the *aus* is in season, the cocoanuts are ripe, and the mats have been woven, another instalment equal to four or five annas is realized, while the balance is paid off gradually as soon as the *amun* is cut or the winter crops gathered in. In the tract where *amun* is the staple produce about five annas rent is realized in December and January, and in the Sunderbun lots the whole year's rent is paid within three months of Pous, Magh, and Falgoon, when the *amun* crop is harvested. In fact there is no fixed general rule all over as regards payment of rent. In some estates† the instalments run the whole year round month by month, although no interest is charged, and it is a relief to observe the good feeling subsisting between the zemindar and ryot of these parts. I do not deny that there are questions of enchancement here and there, which the ryots (with or without reason) are apt to resent, but altogether the tone is more

* Pergunnahs Belfulia and Kharoria.

† Pergunnahs Chiralia, Rangdia, Madhudia, and Hogla.

conciliating. It is also worthy of note that most of the zemindars who are guided by such a spirit are absentees, such as the Ghosal Rajahs of Bhukailas, in Calcutta, who hold eight annas, twelve half-gundas share in pergunnah Selimabad, and whose ryots are grateful for the treatment they meet at the hands of their landlords; the zemindars of pergunnah Khororea, namely, the Dutts of Hatkhola in Calcutta, who assist their ryots with grain and show them every consideration; and the Prosad Roy's, of Bhubaniporo, who holds seven annas of Hogla and Belfulia. A considerable portion of the sub-division is under Government management, five annas of the Hogla Belfulia pergunnah being held under attachment while the whole of pergunnahs Rangdia, Chirulia, and Madhudia are under the Court of Wards.

The Government *kists.*

Of the present Government instalments of payment of revenue, that falling on the 28th June presses heavily on the ryot, as he has no crop in hand from the proceeds of which he can pay his landlord, the *aus* being not then quite ripe. It is true the date falls after the *boro* has been reaped, but this crop is a local one, confined to marshy lands only. But the pressure on the zemindar compels him to realize an instalment in this month, notwithstanding the ryot's difficulty to pay. The second instalment on the 28th September encroaches closely on the *Durga Pooja*, when both ryot and zemindar have need of money for the celebration of that national festival, and could be conveniently put forward by about two months, when the *aus* is ripe. The third instalment (12th January) falls in the midst of the *amun* cutting season, while the 28th March is a very convenient date, as both the dhan and winter crops have then been stored.

Karari rent.

Payment of rent in kind is prevalent in pergunnahs Hogla and Madhudia, and locally known as *karari* rent. The plan is to lease out land, and in lieu of cash a specified quantity of dhan is taken as rent. The rates vary from 2 maunds 30 seers to 4 maunds 30 seers per beegah, being about 6 annas or three-eighths of the produce.

How rents are collected.

The usual mode of collecting rents is for the *gomasta* to go to the nearest hât where he is sure to get the ryots assembled in one place, which saves a great deal of trouble to both parties. The first process in case of inability to pay or recusance is a dun, next settlement by *kistebundi*, and if all these fail the last resource is law.

The *gomasta.*

These circumstances render the *Gomasta* here a more acceptable officer, and the payment of *tahrir*, or yearly *doceur*, to him is voluntary; and he is useful to the ryot in other ways, for he writes his letters for him, advises him in law, and is present at police investigations or when a government official visits the place.

Two statements are herewith submitted in the appendix in order to shew the instalments in which rent* is collected in the Baghat sub-division, and the seasons in which the principal harvests in the district† are gathered.

* Appendix No. 5.
† Appendix No. 6.

CHAPTER V.

TRADE AND COMMERCE.

Hâts.

The subjoined list (Appendix No. 7) shews that there are 53 hâts and bazars in the sub-division, exclusive of the part which did not come under inquiry.

Where the country scarcely knows any roads, and where so many creeks and *khals* intercept passage by land at every step, boats not only take the place of carts for the carriage of goods, but are also the only means of conveyance available for men.

A *haturia* boat.

A *haturia* (bazar-going) boat is usually a long-shaped, swift-going bark, the fore deck of which is laden with the shopkeepers' wares, tobacco, salt, goor, vegetables, and other articles. Behind this heap about a dozen men are seated paddle in hand, striking the waters at full length front and behind as far as the hand can reach, communicating a motion to the boat which distances all ordinary ones. By dusk the wares are all sold, or the remnant is brought back and the party start on their homeward voyage. Generally they come with the tide and glide down at ebb, their journey being so timed. The surf may roll, and the nights may be pitch dark, still the hât-going voyagers are not a bit afraid, for home must be reached.

Morrellgunge.

The Morrellgunge hât is the most important, being by far the largest in size, and commanding as it does a great export trade in rice. Where 24 years ago the tiger roved in the dense impenetrable jungle, British energy has called forth into existence a spacious market-place, lined with *pucca* roads, where large quantities of rice, cocoanuts, and betelnuts find a ready sale twice a week, where the boat-building trade monopolizes a rather extensive corner, where immense heaps of pottery bespeak the activity in that trade, and where weavers ply their looms in a square set apart for them solely.

The river facing commands an imposing view, below which foreign ships come and anchor for the purpose of taking away cargoes of rice and betel-nut. For Morrellgunge, which has been declared a port on 20th November 1869 under the laws in force, is daily growing into importance, having sent out 110,200 maunds of rice and received 530 maunds of salt last year. The accompanying return* shews the state of its export and import trade from the year 1870.

* Appendix No. 8.

The fair at Morrellgunge.

An annual fair, which appears to have been instituted here solely with a view to afford useful recreation to the Sunderbun ryots accompanied with pecuniary gain, is not less important from a commercial point of view. It continues for eight days, beginning with the Shibratri in Falgoon (about the middle of February), when clothes, shoes, umbrellas, drugs, spices, and braziery find a ready sale, while a large quantity of rice exchanges hands at the time for exportation to Calcutta and other places. The enterprising owners of the fair have also instituted a pony race, while songs, music, and fireworks are not wanting for the entertainment of those who are collected together on the occasion.

Fakirhat.

Next to Morrellgunge is Fakirhat on the Bhairab, an old market, although no mention is made of it in Major Rennel's map. As usual, the principal articles of sale and barter are cocoanuts, betel-nuts, tobacco salt, vegetables, and fish, rice is also sold but not in large quantities. There are 14 sugar manufactories here.

Gourrambha.

The Gourrambha hât, situated on the river Bhola, is a rising place of trade much resorted to by the Sunderbun ryots of the south-west. It is a growing rice mart which has risen into importance from the year 1861 (1268 B S.) where boats flock together from the north every week in order to carry away large quantities of that cargo. Native cloth, tobacco, and vegetables find an extensive sale among the ryots here, while the spirit seller has set up more than one stall for the vend of his articles.

Rámpál.

Rámpál is also a large rice mart, and standing in the midst of the Sunderbuns commands a good trade in that article.

Sukdeb Roy's hât.

This place, commonly known as Subidra's hât, is an inland market, where a large supply of cattle imported from the north are sold in the dry season, the sales being greater during May and June, just at the beginning of the agricultural season.

Chitalmari.

At Chitalmari, which is conveniently situated on the Madhumati (which takes the name of Baleswar from this place), there is an extensive wood trade, and the Chittra khal running below is lined on both sides with large supplies of timber brought up from the Sunderbuns. It is known as the largest cattle market in the sub-division, as also a place where *nal* mats find a ready sale.

Markets on the Bhairab.

Kachua, Taleswar, Baghat, Jatrapore, and Mansa are all situated on the Bhairab, where Eastern Bengal boats laden with cargo for Calcutta find a safe and convenient resting place. The first three are also cocoanut marts, amongst which Baghat being also the head-quarters of the sub-division is the most important.

Annual fairs.

Besides the markets enumerated in Appendix No. 7 there are some annual fairs held in the sub-division, of which, that at—

(1.) Morrellgunge has been already described.

(2.) The Maghia fair is held on a *chur* on the northern bank of the Bhairab for about ten days, beginning with the 13th day of the new moon in Chait, which falls about the 15th March. Brazen wares, clothes, and pedlars' articles are imported from Calcutta by local dealers, and a year's supply is generally purchased from this fair by the people of the neighbourhood. The practice of allowing prostitutes to ply their profession here for the time being is a very objectionable one, and should be put a stop to.

(3.) The Karápárá fair is held for eight days from the last day of Chait, and the principal articles sold are clothes, brass wares, confectionery, &c.

(4.) The Pattarpara fair is held at Khan Jehan Ali's tomb, and at Shact Gombez for seven days from the date of the full moon in Chait, when about 4,000 pilgrims, chiefly Mahomedans, assemble at the place. The only articles exposed for sale in the temporary stalls are those which are in demand among the assembled crowd, and the fair is not otherwise important.

Of these, the fairs at Morrellgunge and Maghia are the most promising, but their existence is scarcely known wide enough to attract dealers from a distance. Public notifications might remove this defect, and if a large quantity of coarse blankets could find its way here, it would remove a great desideratum felt by the ryots of these parts for want of winter clothing.

Exports.

The return hereto annexed (Appendix No. 9) shows that the principal articles are rice, betelnut, and cocoanut of which rice occupies a pre-eminent place. But the figures in the statement do not show the exact quantity sent out, as there are sales effected in villages and the Sunderbun *abads* quite independent of market transactions, the extent of which it is difficult to ascertain. The betelnut exports have been estimated partly from shop-keepers accounts and partly from a calculation of sales effected in hâts during season, and the figures under the column "cocoa" have been obtained by following the same course, as there was no other way of arriving at an estimate of the extent of the trade in these articles.

In 1872-73 7,071 maunds of sugar were exported from the different manufactories in Baghat to Backergunge. A small quantity of jute was exported from Chitalmari to Calcutta. Cane sugar, which is exported to Backergunge from Morrellgunge and its vicinity, does not appear in the returns, as no accounts of the sales are obtainable.

Imports. Appendix No. 10.

The most important articles of import are salt and tobacco, the first being supplied from Calcutta and Jhalokati and the second from Nalchiti and Farreedpore, where it is imported from Northern Bengal. Pulses and oil are supplied from the same source and from Magurah; while cloth and iron are imported from Calcutta.

Manufactures. Appendix No. 11, Form G.

The chief manufactures are cloth and date and cane sugar. In almost every hât there are invariably four or five blacksmiths' shops, wherein artizans who have emigrated from the Narrail sub-division are busily engaged in making agricultural implements. There is also a great deal of boat building at Morrellgunge, Kachua, and Chitalmari, and in some villages close to the river.

Goldsmiths find a good deal of work, as there are many well-to-do people in the sub-division.

Red powder.

A moderate quantity of red powder *(abir)* used in the *Dol Jatra* of the Hindoos is manufactured near Jatrapur and other places, and sold at five rupees per maund.

Dhan mahajans.

All talookdars who hold Sunderbun lots are dhan mahajans who keep a stock for the ryots living in their *abads*. The lending begins in Assin, returnable with one-fourth interest after the gathering of the *amun* harvest. Shop-keepers and ryots at Morrellgunge store up dhan for trade as well as for export.

The zemindars in the Baghat sub-division hold dhan stocks for advances to the ryots in case of need, and all landholders and well-to-do ryots invariably keep a stock in hand sufficient for one year's supply at home.

Money-lenders.

Corresponding to the dhan-lending trade there is money lent out by certain shop-keepers at Morrellgunge during the agricultural season at one anna interest per rupee. Sums below Rs. 40 are sometimes lent at one anna six pie per rupee, and in some instances a lump sum is contracted for as interest, payable for the five months which constitute the agricultural season, sometimes amounting to 7½ per cent.

The Eastern Bengal trade.

The Bhairab from Kachna to Alaipoor is the great thoroughfare through which the produce of Eastern Bengal pours into Calcutta. At every flow and ebb of the tide a fleet of boats, the shape of the prow and stern of which easily suggest the district they come from, may be seen gliding up and down freighted with merchandise for the great emporium, and at the spots where they anchor in order to wait for the tide there is a busy scene and a floating bazar where the villagers have come down with their vegetables for supplying the assembled crew, and where the fisherman also finds a readier sale for his article at a higher price than the bazar gives him. The beggar is there in his frail prow-broken canoe or *tal donga*, while the Byrágí, the itinerant minstrel of Bengal, has already boarded some vessel in order to regale the ears of the crew with song and music, often assisted by his helpmate.

During the time our party was employed in the Baghat sub-division, we employed ourselves in collecting the statistics of the river-borne traffic for four weeks from the 25th August, and the results, as embodied in Appendix No. 12, show that of the articles exported from the eastern districts rice occupies the foremost place; and the district of Backergunge, which has been aptly called the granary of Bengal, alone exported 155,948 maunds. Noakhally and Dacca come in next, while Jessore occupies the fourth place. Much of the southern Jessore rice which is imported into the northern parts of this district pass this route. Backergunge sends out also large quantities of betel and cocoa nuts, jute, and mats, while from southern Jessore a good stock of sugar and cocoanuts are also exported. Of the eastern

districts, Sylhet is conspicuous for its potatoes and lime, as also for its oil-seeds and mats. Dacca sends out large quantities of jute, while Tipperah and Mymensing export the same article to a small extent. Chittagong exports rice only, and the Sunderbuns timber and fuel. Men flock in numbers from Noakhally to find employment in Calcutta as boatmen. The vessels which go to Calcutta with these articles return with cargoes of salt and cloth from that place, while Jessore sends out large quantities of sugar to the eastern districts. Timber and fuel find their way from the Sunderbuns to the neighbouring districts of Backergunge and Furreedpore and the northern parts of Jessore.

CHAPTER VI.

THE AGRICULTURAL CLASSES.

The Podes.

The Podes, who inhabit Subdia, Tekatea, Hoorka, Digraj, and other places, are said to be the best cultivators of the soil, but they are a small community. Their chief occupation is agriculture, and they pride in calling themselves the sons of the goddess *Lakshini* (*Ceres*). They are all in comfortable circumstances with neat little houses, and are never wanting in hospitality to strangers; their females being more cleanly than the Chanral women. The Podes will never cut the paddy of their fields, but leave that work to be done wholly by strangers. They assert that they cannot willingly undo what they have raised with their own hands.

The Chanrals.

The Chanrals, although inferior to the Podes in agriculture, excel them in courage and hardihood, and follow numerous other avocations.

They are a numerous class, who subsist by mat-making, boating, and agricultural labor, while a few of them have also taken to the carpenter's trade. Early marriage among them is rather a common practice, which leaves many of their females widows in early life. Re-marriage is unknown, although concubinage is usually resorted to. There is a good deal of unity in Chanral communities under the leadership of the *Matbars* or *Prodhans*,

Their *Matbars*.

who are general referees in all disputes, social or agricultural. No marriages can take place without their advice and permission, when they are entitled to a fee of one rupee; they being themselves exempt from the payment of the customary duty *(Rajota* or *Bheti Marocha)* paid as a respect to the zemindars on such occasions. In feasts given for the restitution of caste they take precedence over others, the invitations being made and the cooks selected through them.

Their females.

The Chanral women, *i.e.*, the widows amongst them, used to resort freely to *hâts* and markets, and to employ themselves in thrashing out the grain. But in April last year the *Matabars*, in order to increase their sense of honor, have, in imitation of the Mussalman ryot, put such freedom under a ban, and the consequence is that these women are now seldom to be seen in public.

Their social habits.

Notwithstanding these restrictions, a Chanral homestead is quite different from a Mahomedan one, as the former is devoid of all those exclusive airs which characterize the latter. You are easily admitted into the Chanral *baris*, where the owner spreads out a mat for your reception. The women, decently clad in a cotton *sauri* with broad red borders, go about working with their veils on quite untrammelled by any sense of exposure before a stranger. In the villages situated on the brink of marshes, where each house standing by itself is like an oasis in a flooded plain, the women go about visiting in *tal dongas*, which they ply

with their own hands. Others, more economical of their time, are watching their fields of ripe dhan on the raised bamboo platforms stuck in the midst of them. The morning hours are spent by the wife in *leping* the house floor with a coating of mud and cowdung, and in rubbing and scrubbing brass pots and pans, by which time the husband has returned with a supply of fish from the *bils* caught by himself, and then the breakfast has to be cooked and the husband and children served at table, after which the house wife thinks of her own bath and her mid-day meal, the surplus being left for the children's tiffin. Some of these latter go to school, and at one place we came across two little Chanral girls, who, sitting side by side with the boys, were attentively employed in tracing out the letters of the alphabet on the plantain leaf.

Their boat races.

Amidst the dull monotony of the ryot's life, it is pleasant to observe some signs of manliness displayed by this class of Hindoos. They hunt the boar and entrap the tiger; but a boat race affords them the highest degree of excitement. Long narrow boats, exceeding in dimensions the limits set down by the obsolete Regulation XXII* of 1793, are built on purpose by some well-to-do head of the community, and on some specified holiday, usually the last day of Sraban, the day of the *Dosohara*, or the last day of Pous, the race is run. On that day the whole population of the neighbourhood is astir, and the banks of the river present a large concourse of sight seers. The boats, be decked with vermilion and large brass eyes at stem and stern, have reached their starting point and then they shoot forth with a speed which would throw a steamer in the distance. A hundred men, who strike the water with their paddles to the measure kept up by the helmsman's feet, are straining every nerve to outstrip their rivals, and the track left by these hundred paddles rises into a wave, which undulates the boats lying near the shore. It is a pity that such outbursts of valor and exuberance of spirit should meet with no echo but in the breasts of those who are engaged in the sport, and that the indigenous gentry should not of themselves encourage such acts of bravery by the distribution of suitable rewards.

The Mahomedans.

Although inferior to the Chanrals in hardihood and power of endurance, the Mahomedan ryots, who form the bulk of the agricultural population, are however more adventurous; for the earliest reclaimers came from this class, and while the tide of immigration is rolling downward they still take the lead in effecting new clearances, where both classes, although working side by side, are to be found forming separate hamlets in the same settlement from a respect to caste feelings.

The first reclaimers.

The first reclaimers, as is to be expected, are not the very best members of the community they have left behind. Attracted by the favorable terms offered, they have forsaken the home of their fathers, which their own backslidings have rendered rather hot for them, and have betaken to the forest in order to turn a new leaf in their life's page. Here their exertions surround them with a degree of importance as having first turned up the soil, their rights in land assume a permanent shape—rights which they cherish dearly and which their sons are proud to inherit, while the loss of a parent or of an uncle under the tiger's claws, or from other accident, serves to enhance the value of such rights. In course of time the reclaimer has already grown into a hawala talukdar with subordinate holders and *pattanias* under him (see the description of land tenures, Appendix No. 13). Ignoring labor with his own hands, he in the second generation is content to supervise and direct his men, while he fast sinks into comparative indolence, betaking to litigation in order to wile away his time.

Ferazi doctrines.

Along the whole range of water-sheds formed by the Baleswar and the adjacent Sunderbun creeks, the Mahomedan population

* See Section 20 of that law.

consists of emigrants from the eastern bank of that great river, where the Ferazi doctrines of Dudumeah of Fareedpore have long been favorably received. Even now the southern most *abads* are being reclaimed by ryots who come across the river from Tushkhali* and other places in the Backergunge district. These doctrines have penetrated further west and are gradually driving away the Hindoo customs which entered largely into the social economy of the Mahomedan. No Mussulman will now ordinarily eat food cooked by a Hindoo or use the *tom-tom* on occasions of marriage or other gladsome event; but marriages are still contracted by parents and guardians early, as amongst Hindoos, and daughters are not usually allowed to inherit along with sons. Marriage with cousins, as prevalent among the higher Mahomedans, is not in vogue, while that rite cannot usually be performed within a year of a parent's demise. Although no division into castes prevails, still caste rules are strictly adhered to, for a man eating and drinking with the members of an opposite faction (দল) is out-casted and subjected to other social inconveniences. These contending factions which exist almost in every village are a most prolific source of dissension, and give rise to frequent disputes about land and to consequent litigation. The reading of prayer at the stated times is strictly adhered to, while the skull cap seldom worn by the ryot of the north is usually in its place here. Young men are fond of keeping a flowing head of hair, which they do not crop until age sprinkles it with grey.

Prayer-houses, *i.e.*, *Juma ghars.*

There are 71 prayer-houses in the 613 villages examined during the season, shewing that there is only one such house to 86 villages, but every Mahomedan reads his prayer in a corner of his parlour.

Polygamy.

Polygamy exists very generally, and *nikas* hastily contracted in the harvest season are as hastily broken; an usual expedient being a suit for alimony wherein the husband disavows the marriage. The first wife is, however, treated with respect, and if a *nika* wife gain ascendancy, the former separates with her children, when a house and lands are apportioned for her maintenance.

I have already said that the Mahomedan is more exclusive than the Hindoo, for he surrounds his yard with a screen of areca leaves, and will on no account allow his women to appear in public. Hence it is difficult to have an insight into his inner life. The inlet running quite beneath his areca grove supplies the housewife with water for her household use as well as for the periodical washing of foul cloth, for it is only the well-to-do people who can avail themselves of the washerman's services. Her common dress is a *sauri* of native manufacture, while curved silver anklets bedeck her feet, betokening thereby the comparative ease of her husband's condition.

Christians.

Descending southwards from the west we meet with some small isolated colonies of native Christians who have settled here for the purpose of agriculture. At Ujalkur, north of Rampal, there are six families of Baptist Native Christians, who cultivate 83 beegahs of land, which is 13½ beegahs per house.

At Kainmari, east of the Arooa Mongla, where a settlement of 16 native Christians of the same class is flourishing side by side with a Chanral colony, the average holding of each Christian family is 12 beegahs 15 cottahs; while further south at Malgazi there are of six families of Roman Catholic native Christians, whose average holdings are 24 beegahs per house.

These Christians have prayer-houses in each settlement, which they attend regularly on Sundays. They are, however, inferior to the Chanrals as cultivators of the soil.

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* Itself a reclamation about 80 years old.

The mud floor of the ryot's house is about three or four feet raised above the surface of the soil, and is constantly damp, which causes sickness. But the biba jia,* a nomad who lives in boats and subsists by fishing, follows a better rule, when he builds up a temporary shed on *terra firma* on a platform raised six or seven feet above the earth.

The ryot's house.

The ryot uses the coarse paddy, *boro, raida, aus*, and the coarser species of *amun*, *i.e.*, *banarjota, ghunshi, kharsheel, kurch*, &c. The finer grain he does not relish as from being easily digestible his appetite is not thereby satisfied. In the working season from Jyet to Assen 3 meals are usual, after which he reverts to 2 meals per day. Pulses are more in use in the rainy season, from Jyet to Bhadra, when the rivers are full and fish is scarce. Fish is abundant when water subsides, and is seldom bought; for every ryot provides himself with a net which is brought for sale in the larger *hâts* by northern dealers. A boat or at least a *tal donga*, is a necessary article of use in a country abounding in rivers and creeks.

His food.

The most prevalent sickness in the Sunderbuns is fever, caused by the low damp soil, and cholera. There are no physicians nor quacks, but in almost every *hât* I visited I found a quantity of quinine for sale, which I was told was in great demand. Vaccination not having been yet introduced, careless inoculation serves to bring in the small-pox in all its terrors. In 1246 (1839 A. D.) a great fever broke out and decimated the population near Baghat. The ravages of the cholera are annually felt from November to April.

Sickness.

CHAPTER VII.

AVERAGE HOLDING OF THE RYOT.

In my last report I mentioned that 10 beegahs of land were the utmost that a ryot could manage with one plough, and this season's experience confirms that view. The returns herewith annexed (Appendix 14) show that the proportion of food-producing land to each plough is as follows:—

Bagirhat	...	16	beegahs per plough.
Morrellgunge	...	18·7	„ „
Rampal ...	...	15·5	„ „

This excess over 10 beegahs is accounted for by the fact that almost all the *boro* land and the forest reclaimed *amun* lands are planted with dhan without the assistance of the plough.

The same returns show the average holding of each ryot, which has been made up with as much care as working in an unfavorable season would permit, for a large portion of land is owned by absent cultivators whose whereabouts were unknown, and the identification of whose fields became a difficult task. The number of houses has fallen short of the census returns, as the bazars and marts did not come within the scope of these enquiries.

The following are some of the approximate results to be obtained from these statements:—

In Baghat there are 15·8 beegahs or 5·26 acres of food-producing land to each cultivating ryot's house, and ·8 acres of food-producing area to each soul.

In Morrellgunge the average size of a farm is 27·2 beegahs, or 9·2 acres, while the food-producing area to each soul of the population is 1·2 acres.

In Rampal the average size of a farm is 25·1 beegahs, or 8·3 acres, and the food-producing area to each member of the population being 1·9 acres.

* Called also Bibadia, in contradistinction to Badia, a class of professional thieves in Jessore.

Average produce of a beegah.

We have now to take into consideration the average produce of a beegah, and here at the outset I would beg to premise that on referring carefully to my notes I find that from an oversight, for which I alone am responsible, the average produce of a beegah in the north of the district has been rather overstated.* The calculations therein made were for a *local* beegah, which is ·46 of an acre and *not* one-third as therein stated, according to which the produce of a standard beegah, or one-third of an acre, is 10 maunds 30 seers, and not 15 maunds as has been there put down. I beg to request that this correction may be made in the report before it is subjected to a review.

In estimating the produce of a beegah in the south, I had to depend merely on verbal statements, as we had taken the field just when dhan had begun to be sown, and brought the work to a conclusion before the harvest was ripe. The concurrent testimony of talukdars as well as ryots shews that the lowest produce is 9 maunds 2 seers per beegah near Baghat, and the maximum 14 maunds 16 seers in the Sunderbuns. Taking a mean, we shall not be far from the truth in assuming 13 maunds as the average produce of a standard beegah of Sunderbun land, and 11 maunds 14 seers as that of a standard beegah of Baghat land. Now, taking the average size of a ryot's farm to be 14·8 beegahs in Baghat, as found above, he has 179 maunds 13 seers, as the produce of his fields, which being converted into rice would yield half the quantity, or 89 maunds 26 seers.

We have not yet taken into account the income of the garden produce of the ryot, which in Baghat is a substantial item. On an average there is ·8 of a beegah of garden land to each house, yielding about Rs. 5 annually in betel-nuts, Rs. 3 in cocoanuts, Rs. 3 in bamboos, and Re. 1 in vegetables and fruits, total Rs. 12, to which I would add Rs. 2 for hay sold.

Against all this we have to put down the expenses of cultivation, which for 15·8 beegahs is nearly as follows:—

	Rs.	A.	P.
Rent of 15·8 beegahs of land at Re. 1 per beegah ...	15	12	9
Ploughing expenses, 45 ploughs at 6 per rupee ...	7	8	0
Transplanting, 25 coolies at 5 per rupee ...	8	5	0
Reaping coolies, 60 at 5 per rupee	12	0	0
Seed-grain, 3 maunds 35 seers	1	12	0
Total ...	45	5	9

Now, let us look into the ryot's daily expenses, and mark if the produce of his fields and of his garden does not cover them. In making such an estimate I will take 6 souls as the average per house on the basis of the last census, of whom 3 are adults and 3 infants. The yearly expenses being approximately as follows:—

A.

	Rs.	A.	P.
(1) 4½ seers of rice per diem, or 39 maunds per annum (at the rate of 1 seer for each adult and 1½ seers for the 3 infants) at Re. 1-4 per maund ...	48	12	0
(2) One maund of rice per annum for guests and beggars	1	4	0
Total of A ...	50	0	0

* See para. 45 of my last report.

B.

		Rs.	A.	P.
(1)	Pottery, cooking vessels, &c, viz.:—			
	2 dhan boilers	0	1	6
	2 rice boilers	0	1	0
	2 curry pots	0	0	6
	2 covers, &c.	0	0	6
	2 earthen bottles	0	0	3
	3 tilliahs (water-pots)	0	3	0
	1 milk jug	0	0	3
		0	7	0
(2)	2 baskets	0	3	0
	1 winnow	0	0	6
		0	3	6
(3)	Cost of toilette of the ryots' wife:—			
	Vermilion	0	1	0
	Looking-glass	0	0	6
	Combs	0	0	6
	Dentifrice	0	1	0
	Waistbands	0	2	0
	Lac bangles	0	2	0
	Bead-necklace	0	2	0
	Needles and thread	0	1	0
		0	10	0
(4)	Wages—			
	Barber	0	8	0
	Chowkidar	0	12	0
		1	4	0
	Total of B ..	2	8	6

C.

Hât purchases paid for in cash:—

(1)	Pulses, 4 chittacks per diem during 4 months when fish is scarce, or 30 seers, at Rs. 2-8 a maund ..	1	14	0
(2)	Vegetables in excess of those grown in his homestead, at 1 anna per month	0	12	0
(3)	Fish, when purchased, at 1 anna per month ..	0	12	0
(4)	Salt at one chittack per day, being nearly 1 tola for each, or 22 seers 13 chittacks, at Rs. 5 per maund	2	13	6
(5)	Oil, 1 seer per month, at Rs. 13¼ per maund ..	4	0	0
(6)	Condiments, 2 annas 6 pie per month ..	1	14	0
(7)	Tobacco, 9 seers per annum, at 2 annas 6 pie per seer	1	6	6
	Goor to sweeten the same, 9 seers, at 6 pie per seer	0	4	6
(8)	Pân leaves, 1,460 in number, or 18 *pons*, at 6 pie per *pon*	0	9	0
	Betel lime, 1½ pie per month	0	1	6
	Catechu	0	1	6
	One hooka and four chillums	0	1	0
(9)	Goor for cakes, &c., 20 seers	1	0	0
	Total of C ..	15	9	6

D.

Clothes :—

	Rs.	A.	P.
3 *dhoties* ... ... } 2 *gamchas* ... ... } 1 sheet for ryot	2	10	0
4 *sauries* for his wife	2	8	0
3 for the other adult woman	1	14	0
Clothes for two children (the 3rd being naked)	2	12	0
2 curtains	2	8	0
	12	4	0
Bedding mats	0	6	0
Total of D ...	22	10	0
„ A ..	50	0	0
„ B ..	2	8	6
„ C ..	15	9	6
„ D ..	12	10	0
Grand Total ..	80	12	0

or Rs. 6-11-8 per mensem.

It will be seen that I have not taken fuel and betelnuts into account, as these are supplied by the ryot's garden, nor any other incidental expenses, such as are usually incurred on the birth of a child, or in the observance of social relationships.

Of the items mentioned above, A represents the money value of a part of the produce of the ryot's fields; the articles enumerated in the heading B may be paid for either in cash or dhan; while C represents the weekly *hât* expenses paid for in cash from the sale proceeds of the cocoa or betelnut. The total D includes the expense incurred on account of clothes, and as the ryot's wife seldom plies her spinning-wheel here,* the purchases must be paid for in the *hât* in cash.

Summing up, we find that while the annual gains of a ryot are Rs. 126-1-0 his expenses are Rs. 126-1-9, as noted below :—

Receipts.

	Rs.	A.	P.
Dhan 179 maunds 13 seers	112	1	0
Supari	5	0	0
Cocoa	3	0	0
Bamboos	3	0	0
Vegetables	1	0	0
Hay	2	0	0
Total ...	126	1	0

*On the banks of the Baleswar, where the men are of Barisal origin, I have heard it said that spinning was given up when 8 or 10 years ago Government prohibited it as interfering with the British cloth trade. Although this is a mistake, I mention the fact to show how in consequence of the acts of Government being in sufficiently explained they are construed to the disadvantage of the people. I remember that about that time an enquiry was set on foot to ascertain the extent of cotton cultivation, which must have given rise to this erroneous impression. In the west of the sub-division this fear does not exist, as I found ryots exchanging at *hâts* the thread spun by their wives for cotton.

Disbursement.

	Rs.	A.	P.
Diet and other expenses as detailed	80	12	0
Ploughing expenses	45	5	9
Total ...	126	1	9

which conclusively shows that the Baghat ryot lives from hand to mouth. But the produce of his date trees and mat-making go a great way to help him on; and the adjacent Sunderbuns afford him an easy opportunity for trading in fuel, thatching leaf, &c.

The Sunderbun ryot is better off. His holding (26 standard beegahs on an average) produces* about 338 maunds of dhan, which at nine annas a maund yields him Rs. 190-2-0 in cash, against which the following items have to be set down:—

	Rs.	A.	P.
Rent, at twelve annas a beegah	19	8	0
39 ploughs,† six ploughs per rupee	6	8	0
Transplanting, 52 coolies, at 3 per rupee ...	17	5	3
Reaping one-fifth the produce	38	0	5
Seed-grain, 5 maunds 14 seers, at 9 annas per maund...	3	0	1
Total ...	84	5	9

Add to this his expenses of living, Rs. 80-12, which when deducted from his income leaves a surplus of Rs. 25 per annum.

In addition to this he has an income from his sugarcane and kachu and plantain gardens. The sale of thatching straw yields him nine-half annas at the rate of Rs. 6 per beegah, while his young areca and cocoanut trees have also already begun to bear fruit. On the whole, he is more comfortably off than all other Jessore ryots.

Nature of ryots' holding.

The ryots' holding is generally one, in which a right of occupancy has accrued, the rent being enhanceable according to law. In the Sunderbuns a hawala is a ryot's usual tenure, and if the talukdar has conceded to him permanent rights, it is secure against further enhancement. The lowest in the scale is a *Karshadar*, who, holding under rights of occupancy which can not be ignored, has to pay a gradually enhanced rate as the lands become more productive.

Number and size of farms.

Appendix No. 15 shews the number and size of farms in the sub-division, from which it appears that the largest number of holdings is under 3 acres, which is nearly equal to 10 beegahs. The larger holdings are situated mostly in Morrellgunge.

Local weights and measures.

Appendix No. 16 contains a table of weights and measures as prevalent in the sub-division.

CONCLUSION.

As it is not intended that these statistical inquiries should extend to the other parts of the district, I hereby bring my work to a close; and in doing so would beg leave to add that as my task has not been an easy one, the difficulties with which I had to contend may, in some measure, outweigh the many deficiencies with which this report abounds.

JESSORE,
The 24th December 1873.

RAM SHUNKER SEN,
Deputy Collector.

* At 13 maunds per standard beegah.
† This expense is not always incurred.

Abstract of the Area and Population of each Thannah in Baghat Sub-Division.

(Extracted from the Bengal Census Report, 1872.)

Sub-Division.	Thannah.	Area in square miles.	Number of villages, mouzahs, or townships.	Number of houses.	Total population.	Persons per square mile.	Villages, mouzahs, or townships per square mile.	Persons per village, mouzah, or township.	Houses per square mile.	Persons per house.
Baghat	Baghat	229	307	28,326	138,560	605	1·34	451	124	4·9
Baghat	Rampal	340	141	5,359	45,160	331	·71	320	41	8·4
Baghat	Morrellgunge		101	8,746	67,296			666		7·7
	Total	569	549	42,431	251,016	936	1·02	1,437	84	7·

APPENDIX No 1.

Statistical Return D (Agriculture), Sub-Division Baghat, District Jessore.
(Crops cultivated in acres.)

	Permanently settled estates in Baghat, Rampal, and Morrellgunge.			Sunderbun lots in Rampal and Morrellgunge.			Total.		
	A.	R.	P.	A.	R.	P.	A.	R.	P.
Rice ... Amun ...	196,794	2	10	71,754	0	28	268,541	2	38
Rice ... Aus ...	17,077	2	24	1,026	0	19	18.103	3	3
Rice ... Boro and raida ...	8,129	3	14	.....			8,129	3	14
Total ...	222,002	0	8	72,780	1	7	294,782	1	15
Other food-grains ...	2,697	1	15	4	0	18	2,701	1	33
Oil seeds ...	2,710	2	21	0	3	28	2,711	2	9
Date ...	491	1	19	18	0	35	439	2	14
Sugar-cane ...	616	2	33	468	1	2	1,084	3	35
Cotton ...	73	3	0	.....			73	3	0
Jute ... Pat ...	656	3	30	19	3	27	676	3	17
Jute ... Mesta ...	28	1	25	4	0	0	32	1	25
Total ...	685	1	15	23	3	27	709	1	2
Tobacco ...	11	2	12	.....			11	2	12
Cocoanut ...	2,181	1	36	203	3	3	2,385	0	39
Betelnut ...	4,644	2	30	85	1	14	4,730	0	4
Vegetable ...	481	0	22	69	1	2	550	1	24
Mango and jack, &c. ...	2,709	1	2	109	2	0	2,818	3	2
Betel-leaf ...	126	1	27	.....			126	1	27
Thatching grass ...	1,373	0	5	468	0	5	1,841	0	10
Red pepper ...	3	2	31	2	0	37	5	3	28
Coriander and kalijera, randhuni, &c. ...	13	0	36	.....			13	0	36
Turmeric ...	56	0	2	1	2	35	77	2	37
Onion and garlic ...	4	2	30	0	3	28	5	2	1 8
Bokam or dyewood ...	3	2	14	.....			3	2	1 4
Total ...	240,835	3	38	74,236	2	1	315,072	1	39
Deduct land cultivated under more than one crop shown twice in this statement ...	2,494	2	19	.....			2,494	2	19
Total crop and rent-producing land ...	238,341	1	19	74,236	2	1	312,577	3	20

APPENDIX No. 1.

Statistical Return D.(a) (Agriculture).—Sub-Division Bagirhat, District Jessore.

(Crops cultivated in acres.)

	Rice.				Other food grains.	Oil seeds.	Date.	Sugarcane.	Cotton.
	Amun.	Aus.	Bora and raida.	Total.					
Thannah Baghat	95,788 1 3	15,015 1 28	8,129 3 14	118,933 2 5	2,989 0 12	2,150 1 37	326 1 1	144 2 20	31 1 5
Rampal ... ... Permanently settled estates.	65,256 0 26	739 0 39	.....	65,995 1 25	608 1 3	560 0 24	66 1 16	1 2 26	42 1 35
Rampal ... ... Sunderbun lots ...	23,971 2 2	.....	.....	23,971 2 2	.....	.....	.....	.....	.....
Total	89,227 2 28	739 0 39	.....	89,966 3 27	608 1 3	560 0 24	66 1 16	1 2 26	42 1 35
Merrellgunge ... Permanently settled estates.	35,750 0 21	1,322 3 37	.....	37,073 0 18	.....	.....	28 3 2	470 1 27	.....
Merrellgunge ... Sunderbun lots ...	47,782 2 26	1,026 0 19	.....	48,808 3 5	4 0 18	0 3 28	18 0 35	468 1 2	.....
Total	83,532 3 7	2,349 0 16	.....	85,881 3 23	4 0 18	0 3 28	46 3 37	938 2 29	.....
Grand Total ...	268,548 2 38	18,103 3 3	8,129 3 14	294,782 1 15	2,701 1 33	2,711 2 9	439 2 14	1,084 3 35	73 3 0

APPENDIX No. 1.—*(Continued.)*

Statistical Return D.(a) (Agriculture).—Sub-Division Bagirhat, District Jessore.

(Crops cultivated in acres.)

		Jute.			Tobacco.	Cocoanuts.	Betelnuts.	Vegetables.	Mango and jack, &c.	Betel-leaf.
		Pat.	Mesta.	Total.						
Thannah Baghat		524 2 9	28 1 25	552 3 34	11 2 12	1,750 1 27	3,830 1 7	375 1 20	2,361 0 6	126 1 27
Rampal	Permanently settled estates	130 0 11	.....	130 0 11	.....	113 3 2	320 3 14	68 2 38	228 2 9	.....
	Sunderbun lots	.....	.....	.....	.....	.....	.....	.....	24 3 7	.....
	Total	130 0 11	.....	130 0 11	.....	113 3 2	320 3 14	68 2 38	253 1 16	.....
Morrellgunge	Permanently settled estates.	2 1 10	.....	2 1 10	.....	317 1 7	493 2 9	37 0 4	119 2 27	.....
	Sunderbun lots	19 3 27	4 0 0	23 3 27	.....	203 3 3	85 1 14	69 1 2	84 2 33	.....
	Total	22 0 37	4 0 0	26 0 37	.....	521 0 10	578 3 23	106 1 6	204 1 20	.....
Grand Total ...		676 3 17	32 1 25	709 1 2	11 2 12	2,385 0 39	4,730 0 4	550 1 24	2,818 3 2	126 1 27

APPENDIX No. 1.—*(Concluded.)*

Statistical Return D.(a) (Agriculture).—Sub-Division Bagirhat, District Jessore.

(Crops cultivated in acres.)

	Thatching grass.	Red pepper.	Coriander, kalijera, randhuni, &c.	Turmeric.	Onion and garlic.	Bakam.	Total.	Deduct land cultivated under more than one crop shown twice in this statement.	Total crop and rent-producing land.
Thannah Baghat	1,323 3 4	2 1 12	13 0 36	74 2 30	0 3 13	3 2 14	134,101 3 2	2,241 2 30	131,860 0 12
Rampal ... Permanently settled estates.	36 0 5	1 1 19	.....	1 1 12	3 3 17	.....	68,178 3 16	252 3 29	67,925 3 27
Rampal ... Sunderbun lots ...	.....	.....	.....	.....	.....	.....	23,996 1 9	.....	23,996 1 9
Total	36 0 5	1 1 19	.....	1 1 12	3 3 17	.....	92,175 0 25	252 3 29	91,922 0 36
Morrellgunge ... Permanently settled estates.	13 0 36	.....	.....	.....	.....	.....	38,555 1 20	.....	38,555 1 20
Morrellgunge ... Sunderbun lots	468 0 5	2 0 37	.....	1 2 35	0 3 28	.....	50,240 0 32	.....	50,240 0 32
Total	481 1 1	2 0 37	.....	1 2 35	0 3 28	.....	88,795 2 12	.....	88,795 2 12
Grand Total ...	1,841 0 10	5 3 28	13 0 36	77 2 37	5 2 18	3 2 14	315,072 1 39	2,494 2 19	312,577 3 20

APPENDIX No. 2.

Statistical Return E (Agricultural).—Sub-Division Baghat (Mollahat thannah excepted).

Ascertained area in acres.

	Permanently settled estates in Baghat, Rampal, and Morellgunge.			Sunderbun lots in Rampal and Morellgunge.			Total.		
	A.	R.	P.	A.	R.	P.	A.	R.	P.
Cultivated.									
Irrigated—By private individuals	224	1	17	.....			224	1	17
Unirrigated	238,117	0	2	74,236	2	1	312,353	2	3
Total ...	238,341	1	19	74,236	2	1	312,577	3	20
Uncultivated.									
Grazing land	2,915	1	5	249	1	14	3,164	2	19
Culturable waste. Cultivated within the last 3 years ...	1,538	1	29	5,905	0	31	7,443	2	20
Culturable waste. Not cultivated within the last 3 years ...	3,606	2	2	23,364	3	31	21,971	1	33
Unculturable waste	10,084	3	4	19,343	0	12	29,427	3	16
Total ...	18,145	0	0	48,862	2	8	67,007	2	8
Total cultivated and uncultivated...	256,486	1	19	123,099	0	9	379,585	1	28
Bastu or homestead land ...	3,586	1	37	425	0	17	4,011	2	14
Grand total ...	260,072	3	16	123,524	0	26	383,597	0	2

APPENDIX No. 2.

Statistical Return E.(a) (Agricultural).—Sub-Division Baghat (Thana Mollahat excepted).

(Ascertained area in acres.)

	Cultivated.			Uncultivated.							
	Irrigated.		Total.		Culturable waste.			Total.	Totals of 3rd and 8th columns.	Bastu land.	Grand Total.
	By private individuals.	Unirrigated.		Grazing land.	Cultivated within the last three years.	Not cultivated within the last three years.	Unculturable waste.				
Baghat	224 1 17	131,635 2 35	131,860 0 12	2,093 2 13	914 0 19	1,752 0 36	6,665 2 39	11,425 2 27	143,285 2 39	2,690 3 32	145,976 2 31
Rampal { Permanently settled estates. ...	.....	67,925 3 27	67,925 3 27	484 1 23	567 0 20	1,791 3 10	3,270 2 28	6,114 0 1	74,039 3 28	550 0 18	74,590 0 6
Rampal { Sunderbun lots ...	.....	23,996 1 9	23,996 1 9	82 3 36	166 3 29	1,170 0 32	7,533 0 36	8,953 1 13	32,949 2 22	52 0 17	33,001 2 39
Total ...	.....	91,922 0 36	91,923 0 36	567 1 19	734 0 9	2,962 0 2	10,803 3 24	15,067 1 14	106,989 2 10	602 0 35	107,591 3 5
Morrellgunge. { Permanently settled estates.	.....	38,555 1 20	38,555 1 20	337 1 9	57 0 30	62 1 36	148 1 17	605 1 12	39,160 2 32	345 1 27	39,506 0 19
Morrellgunge. { Sunderbun lots ...	.....	50,240 0 32	50,240 0 32	166 1 18	5,738 1 2	22,194 2 39	11,809 3 16	39,909 0 35	90,149 1 27	373 0 0	90,522 1 27
Total ...	.....	88,795 2 12	88,795 2 12	503 2 27	5,795 1 32	22,257 0 35	11,958 0 33	40,514 2 7	129,310 0 19	718 1 27	130,028 2 6
Grand Total ...	224 1 17	312,353 2 3	312,577 3 20	3,164 2 19	7,443 2 20	21,971 1 33	29,427 3 16	67,007 2 8	379,585 1 28	4,011 2 14	383,597 0 2

APPENDIX No. 3.

Return of Live Stock.

BENGAL SECRETARIAT

NAME OF THANNAH.	Cows and Bullocks.	Horses.	Ponies.	Sheep.	Goats.	Pigs.	Carts.	Boats.	Ploughs.	Number of houses.
Baghat	85,135	69	54	33	6,327	17	2	4,371	13,102	28,326
Lampal	37,014	24	27	2	6,003	37	...	1,122	8,358	5,359
Torrellgunge	55,021	52	23	8	1,877	...	1	3,027	10,200	8,746
Total ...	177,170	145	104	43	14,207	54	3	8,520	31,660	42,431

E. 1.

Prices of produce and labor at the end of the year, Sub-Division Baghat.

(Price of produce per maund of 80 lbs.)

	Rs.	A.	P.
Paddy	0	10	0
Mashkalai	1	4	0
Musuri	1	6	0
Mustard-seed	3	0	0
Til-seed	2	8	0
Date jaggery	1	12	0
Sugarcane jaggery	3	4	0
Jute	1	8	0
Tobacco (country)	3	0	0
Cocoanuts (per thousand)	20	0	0
Betelnuts (per 11,550 in number)	3	2	0
Vegetables { Kochu (per 20 in number) ...	1	4	0
Vegetables { Plantain, green (per 80 in number) ...	0	2	6
Vegetables { Brinjal (per maund)	1	4	0
Betel-leaf (per kahan, or 1,280 leaves) ...	0	8	0
Thatching grass (per 140 bundles)	1	0	0
Long pepper	5	0	0
Coriander, aniseed, &c.	0	10	0
Turmeric and ginger	5	8	0
Onion and garlic	2	0	0
Milk	3	12	0
Ghee	26	10	0
Butter	35	0	0
Oil	12	0	0
Rice	1	8	0
Salt	5	0	0
Plough bullocks, each from Rs. 5 to ...	10	0	0
Sheep, each from 12 annas to	1	4	0
Iron (per maund)	0	4	0

APPENDIX No. 4.

PART III.—D 3.

Rates of rent and produce, Sub-Division Baghat.

	Rs.	A.	P.		Rs.	A.	P.
Average rent per acre for land suited for—							
Rice	2	4	0	to	3	12	0
Other food-grains	2	4	0	„	3	12	0
Oil-seeds	2	4	0	„	3	12	0
Date	2	4	0	„	3	12	0
Sugarcane	5	4	0	„	6	12	0
Cotton	2	4	0	„	3	12	0
Jute	2	4	0	„	3	12	0
Tobacco	2	4	0	„	3	12	0
Cocoanut	2	4	0	„	6	0	0
Betelnut	2	4	0	„	6	0	0
Vegetable	2	4	0	„	3	12	0
Mango, jack, &c.	2	4	0	„	4	12	0
Betel-leaf	6	12	0	„	7	8	0
Thatching grass	2	4	0	„	3	12	0
Long pepper	2	4	0	„	3	12	0
Coriander, aniseed, &c.	2	4	0	„	3	12	0
Turmeric, ginger, &c.	2	4	0	„	3	12	0
Garlic, onion	2	4	0	„	3	12	0

Average produce of land per acre in maunds.

	Mds.	Srs.	Ch.		Mds.	Srs.	Ch.
Paddy	30	0	0	to	39	0	0
Other food-grains { Black mugh ...	6	0	0	„	9	0	0
Other food-grains { Musari	6	0	0	„	9	0	0
Oil seeds { Mustard ...	3	30	0	„	5	10	0
Oil seeds { Til	4	20	0	„	7	20	0
Date goorh	45	0	0	„	60	0	0
Sugarcane do.	15	0	0	„	18	0	0
Cotton	2	10	0	„	3	30	0
Jute	9	0	0	„	15	0	0
Cocoanut (per tree, 45 in number)		....				....	
Betelnut (per tree, 242 in number)		....				.....	
Vegetable	15	0	0			... ..	
Thatching grass, 1,500 bundles ...		.....				.. ..	
Long pepper	3	0	0			.....	
Coriander, aniseed, &c. ...	3	0	0			.....	
Turmeric and ginger	8	0	0	to	10	0	0
Onion and garlic	15	0	0	„	20	0	0

APPENDIX No. 5.

Table of instalments of Rent current in Baghat Sub-Division.

	Khororia Pergunnah.		* Belfulia Pergunnah.	*Hogla Pergunnah	Cherulia, Modhudia, Rangdia Pergunnahs.	Havili Pergunnah.	Selimabad Pergunnah.	Sunderbun lots.
	Boro producing land.	Amun producing land.						
Baisakh (April and May)	12 annas ...	Two months due, or 2 annas 9 pie.	8 annas after boro	1 anna after boro	These three pergunnahs are under the Court of Wards and the rents are realized in 12 instalments during the whole year. The arrears of the first six months being cleared off in Asin, and of the latter six months in Chaitra.			
Jaista (May and June) ...		Ditto ...				4 annas after aus.		
Asar (June and July) ...	.....	.....	2 annas after boro	Ditto		.....	2 annas after aus.	
Sraban (July and August)	.....	.....		5 annas after cocoanut and aus.		.....	2 annas after aus and cocoannt.	
Bhadra (August and September).	.....	.....	2 annas after mats			.....	2 annas after cocoanut.	
Assin (September and October).	2 annas ...	Two months due, or 2 annas 9 pie.		1 anna after aus ...		4 annas after supari and cocoanut.	3 annas after supari and cocoanut.	
Kartik (October and November).		.....	1½ annas after raida.	½ anna after aus ...				
Agran (November and December).		Four months due. or 5 annas 6 pie.		1½ annas after betelnuts.				
Pous (December and January).			1 anna after amun	3 annas after amun		4 annas after amun	4 annas after amun	6 annas after amun.
Magh (January and February).	2 annas	.....	Ditto	2 annas after amun		.....	.....	8 annas after amun.
Falgun (February and March).		.....	½ anna after winter crops.	1 anna after winter crops.		.....	3 annas after winter crops.	2 annas after amun.
Chaitra (March and April)		Two months due, or 2 annas 3 pie.	.....	.....		† 4 annas after winter crops.		

* Five annas of these two pergunnahs are under attachment.

† If at this instalment rent cannot be paid in cash, it is sometimes paid in kind, in which case 8 seers of dhan more than the usual bazar rate in a rupee is allowed.

APPENDIX No. 6.

Return of principal harvest seasons in the District of Jessore.

Names of Crops.	The tract to which confined.	Date of sowing.	Gathering or manufacturing season.	Remarks.
I.—Staple food-grains—				
Boro dhân	Nurrail, Khulna, and Bagirhat Sub-Divisions	October, November, and December.	April and May.	
Aus dhân	All over the district	April and May	July and August.	
Raida dhân	Nurrail, Khulna, and Bagirhat Sub-Divisions	October and November.	October and November next year.	
Amun dhân	All over the district	May to September	November to January.	
II.—Minor food-grains—				
Wheat	Magurah and Jhenida	November	March.	
Barley	Jessore, Magurah, Jhenida, and Nurrial	Ditto	Ditto.	
Chena	Ditto	November and December	April.	
Kaon	Ditto	April	July.	
Dhonda	Mugurah and Jhenida	Ditto	Ditto.	
Bhura	Jessore, Jhenida, and Magurah	May	July and August.	
III.—Other food-grains—				
Mash kalaye	Throughout the district	October and November	January and February.	
Moong, *Musuri*, *Khesari*, *Matur*	All over the district	Ditto	March.	
Gram	Jessore, Jhenida, and Magurah	Ditto	Ditto.	
Arahar	Ditto	April and May	December and January.	
IV.—Oil Seeds—				
Mustard	All over the district	October and November	February and March.	
Linseed	Jessore, Jhenida, and Magurah	Ditto	Ditto.	
Til or sesamum	The whole district	October and March	January and July	Two different crops.
V.—Sugar—				
Date	The whole district	.....	20th November to 22nd February.	
Cane	Jhenida, Magurah, Nurrail, and Bagirhat	February	September to February.	
VI.—Cocoanut	Jessore, Khulna, and Bagirhat	.....	All round the year, but especially in August and September.	
VII.—Betelnut	Ditto	.....	September to December.	
VIII.—Chillies	Jessore and Jhenida	June	January.	
IX.—Indigo	The whole district excepting Bagirhat	October and April	June to August	Two seasons of sowing.
X.—Fibres—				
Jute	A limited cultivation throughout the whole district.	March and April	August and September.	
Sunn	Jessore, Magurah, Jhenida, and Nurrail	January and May	April and August	Two crops.

APPENDIX No. 7.

APPEN

Return of Hâts,—Sub-Division

No.	Name of Hât.	Name of thannah wherein situated.	On what river situated.	Name of proprietor.	Annual rent at which leased out to ijaradar.
					Rs.
1	Amtolah ...	Bagirhat ...	Kamarkhali Khal ...	Mohima Chunder Roy ...	.....
2	Amtolah ...	Rampal ...	Dhaitkhali ...	Goburdanga Estate ...	.....
3	Bagirhat ...	Bagirhat ...	On the Bhairab ...	Mohima Chunder Roy and others.	.....
4	Badhal ...	Morrellgunge ...	On the Bishkhali ...	Nakuleswar Roy ...	100
5	Baliaghatta ...	Bagirhat ...	Bhola ...	Durga Prasad Roy ...	.....
6	Baonta ...	Ditto ...	Bhairab ...	Goburdanga Estate ...	.....
7	Banagram ...	Morrellgunge ...	Banagram Khal ...	Kamal Kumari Chowdharani	5
8	Basurhat ...	Bagirhat ...	Mater Khal ...	Mudan Mohun Bose and others.	.....
9	Baluibunia ...	Morrellgunge ...	Pangoochi ...	Ram Tanu Biswas ...	5
10	Charakhali ...	Bagirhat ...	Goalbathan ...	Mohima Chunder Roy and others.	.....
11	Chakeri ...	Rampal ...	Dhaitkhali ...	Goburdanga Estate ...	50
12	Chamar's Hât ...	Bagirhat ...	Jugikhali ...	Hari Prosad Roy Chowdhary	15
13	Chandpai ...	Rampal ...	Chandpai ...	Shama Soondari Dasi and others.	.....
14	Chitalmari (*c*) ...	Bagirhat ...	On the confluence of the Madhumati and Chitra.	Abdool Rohim and others.	200
15	Chingrakhali ...	Morrellgunge ...	Chingrakhali Khal ...	Jan Ali Khan ...	.....
16	Choolkati ...	Bagirhat ...	Choolkati Khal ..	Durga Prasad Roy Chowdary.	.....
17	Dhalchaka ...	Ditto ...	Dhalchaka Khal ...	Goburdanga Estate ...	.....
18	Dhaighata ...	Rampal ...	Inland ...	Maharaj Sing ...	.....
19	Daibagnakati ...	Morrellgunge ...	Sankarikati Khal ...	Ram Tanu Biswas ...	100
20	Depara ...	Bagirhat ...	Taleswar Khal ...	Gopi Nath Sarkar ...	100
21	Fakirhat (*d*) ...	Ditto ...	Bhairab ...	Paresh Nath Ghosh ...	.....
22	Fakirhat ...	Ditto ...	Ditto ...	Kali Prasad Roy and others.	500
23	Fatehpur ...	Ditto ...	Ditto ...	Raja Satya Nund Ghoshal ...	42
24	Gaokkhali ...	Ditto ...	Boata Khal ...	Mohima Chunder Roy ...	.....
25	Ghose's Hât ...	Ditto ...	Joukhali Khal ...	Goburdanga Estate ...	.....
26	Gilatola ...	Rampal ...	Gilatola Khal ...	Ditto ...	35

(*c*) Signifies that the place is also a cattle market.

DIX No. 7.

Bagirhat, District Jessore.

On what day held.	Approximate number of persons attending.	Chief articles sold.	REMARKS.
Tuesday, Saturday ...	150	Rice, paddy, fish, vegetables, cloth, salt, oil, tobacco, betel-leaf, betelnut, &c.	
Wednesday, Saturday ...	200	Salt, oil, tobacco, cocoanut, arecanut, &c.	
Sunday, Wednesday ...	1,000	Rice, paddy, cloth, cocoanut, arecanut, poultry, tobacco, salt, oil, betel-leaf, fish, &c.	Middle class school, post-office, zemindary cutcherry, moonsiff's court, sub-divisional Court, police station.
Sunday, Thursday ...	500	Paddy, rice, salt, tobacco, arecanut, &c.	Guru patshala.
Sunday, Wednesday ...	25	Fish, salt, oil, vegetables, &c.	
Monday, Friday ...	30	Fish, vegetables, betel-leaf &c.	
Monday, Friday ...	100	Tobacco, betelnut, paddy, rice, oil, salt.	Letter-box, middle class school zemindary cutcherry.
Tuesday, Saturday ...	250	Fish, oil, betelnut, betel-leaf, cloth, paddy, rice, &c.	
Wednesday, Saturday ...	100	Paddy, rice, fish, oil, salt, vegetables, &c.	
Wednesday, Sunday ...	50	Fish, vegetables, oil, &c. ...	
Tuesday, Friday ...	300	Betelnut, paddy, salt, oil, &c.	
Monday, Wednesday ...	200	Fish, vegetables, &c.	
Monday, Thursday ...	200	Paddy, rice, vegetables, cocoanut, &c.	
Saturday, Wednesday ...	3,000	Rice, paddy, cloth, mats, wood, timber, arecanut, cattle, &c.	
Monday, Friday ...	150	Fish, vegetables, rice, paddy.	Guru patshala.
Ditto ...	25	Fish, salt, oil, tobacco, &c. ...	
Ditto ...	200	Ditto ...	
Tuesday, Friday ...	100	Rice, salt, oil, &c.	
Wednesday, Saturday ...	400	Paddy, rice, fish, vegetables, &c.	
Sunday, Thursday ...	600	Ditto.	
Daily Bazar ...	.....	Fish, vegetables, &c.	
Wednesday, Sunday ...	800	Arecanut, tamarind, pottery, rice, cloth, salt, cocoanut, &c.	Police out-post, post-office.
Monday, Thursday ...	400	Fish, oil, salt, cloth, rice, &c.	
Monday, Friday ...	250	Ditto ...	
Ditto ...	70	Fish, oil, salt, &c. ...	
Monday, Thursday ...	60	Oil, salt, fish, betel-leaf, &c.	

(*d*) Signifies that the place is also a daily market.

APPEN

Return of Hâts,—Sub-Division

No.	Name of Hât.	Name of thannah wherein situated.	On what river or road-side.	Name of proprietor.	Annual rent at which leased out to izaradar.
					Rs.
27	Gourrumbha (*c*).	Rampal ...	Bhola ...	Kali Prasad Roy Chowdhary	100
28	Jatrapur (*d*) ...	Bagirhat ...	Bhairab ...	Gobardanga Estate ...	.....
29	Jhan Jhania ...	Rampal ...	Daitkhali ...	Deb Nath Ghosh ...	.....
30	Kaliganj ...	Bagirhat ...	Bhairab ...	Sree Nath Dutt ...	.....
31	Kaliganj ...	Rampal ...	Kumerkhali ...	Goburdanga Estate ...	.....
32	Katali ...	Ditto ...	Katali Khal ...	Deb Nath Ghosh and others,	.....
33	Katakhali ...	Bagirhat ...	Bhairab ...	Biswcswar Datta ...	40
34	Kachua ...	Ditto ...	Ditto ...	Ananda Mai Dasi ...	200
35	Karamara ...	Ditto ...	Ditto ...	Gobardanga Estate ...	.....
36	Lakpur ...	Ditto ...	Jugikhali ...	Parbati Churun Roy and others.	50
37	Mandara ...	Ditto ...	Talessur Khal ...	Ananda Nath Roy and others.	62
38	Mansa (*d*) ...	Ditto ...	Bhairab ...	Purusottam Ghosh ...	12
39	Magra ...	Ditto ...	Rohimabad Khal ...	Kamala Kant Roy ...	15
40	Morrellgunge (*d*) (*c*).	Morrelgunge ...	Panguchi ...	Messrs. Morrell & Lightfoot	3,000
41	Mukherjee's Hat	Bagirhat ...	Mater Khal ...	Goburdanga Estate ...	12
42	Noapara ...	Ditto ...	Noapara Khal ...	Hara Nunda Ghosh ...	.....
43	Panighat ...	Ditto ...	Bhairab ...	Gobardanga Estate ...	4
44	Phailarhat ...	Rampal ...	Dhaitkhali ...	Kali Prasad Roy Chowdhary	10
45	Rampal ...	Ditto ...	Ditto ...	Hara Nund Ghosh ...	36
46	Rakhalgachi ...	Bagirhat ...	Rakhalgachi Khal ...	Prosonna Chunder Nag and others.	.....
47	Shukdeb Roy's Hât (*c*).	Ditto ...	Ichhamati ...	Hariprasad Roy Chowdhary.	120
48	Shib's Bazar (*d*).	Ditto ...	Bhairab ...	Nrisingha Datta and others	.....
49	Shonakhali ...	Ditto ...	Ditto ...	Ditto ...	.....
50	Shonatali ...	Rampal ...	Baliaghatta Khal ...	Purusottum Ghosh ...	.....
51	Sholkhali ...	Morrellgunge ...	Sholkhali Khal ...	Krishna Kamini Chowdharani and others.	50
52	Taleswar ...	Bagirhat ...	Bhairab ...	Mohima Chunder Roy ...	300
53	Umajuri ...	Ditto ...	Igland ...	Kali Nath Biswas ...	25

(*d*) Signifies that the place is also a daily market.

DIX No. 7.—(*Continued*).

Bagirhat, District Jessore.

On what day held.	Approximate number of persons attending.	Chief articles sold.	REMARKS.
Monday, Thursday ...	700	Paddy, rice, salt, and 10 or 15 cattle in the months of Choit and Baisak.	Letter-box, zemindary cutcherry.
Tuesday, Saturday ...	600	Paddy, rice, betelnut, fish, vegetables, cocoanut, &c.	Post-office letter-box zemindary cutcherry.
Wednesday, Saturday ...	200	Paddy, rice, oil, salt, &c. ...	
Tuesday, Saturday ...	250	Rice, cloth, salt, betelnut, &c.	
Ditto ...	125	Oil, salt, fish, betel-leaf, &c. ...	
Wednesday, Saturday ...	350	Paddy, rice, cloth, &c. ...	A zemindary cutcherry.
Monday, Friday ...	300	Rice, cloth, salt, oil, &c. ...	
Monday, Thursday ...	1,000	Rice, salt, cocoanut, betelnut oil, fish, vegetables, &c.	Post-office, Police out-post.
Monday, Friday ...	80	Rice paddy, &c.	
Tuesday, Friday ...	300	Salt, fish, rice, &c.	
Monday, Friday ...	400	Fish, rice, paddy, &c.	
Daily Bazar ...	300	Paddy, rice, fish, vegetables, &c.	Zemindar's cutcherry, middle class school.
Monday, Thursday ...	500	Cloth, rice, paddy, cocoanut, betelnut, fish, salt, &c.	Narail Zemindar's cutcherry.
Monday, Friday ...	1,500	Paddy, rice, cloth, cocoanut, arecanuts, cattle, &c.	Port, sub-registrar's office, post-office, police station, Messrs. Morrell and Lightfoot's zemindary cutcherry.
Ditto ...	60	Oil, fish, salt, vegetables, &c. ...	
Thursday, Sunday ...	100	Fish, vegetables, &c.	Middle class school, post-office.
Tuesday, Saturday ...	25	Fish, salt, vegetables, &c. ...	
Thursday, Sunday ...	60	Rice, salt, oil, fish, &c.	
Tuesday, Friday ...	500	Paddy, rice, cloth, &c.	Police station, post-office, zemindary cutcherry.
Thursday, Sunday ...	50	Fish, salt, oil, tobacco, &c. ...	
Tuesday, Saturday daily bazar.	1,000	Paddy, rice, cloth, cattle, &c.	
Wednesday, Sunday ...	50	Fish, vegetables, &c.	
Tuesday, Saturday ...	60	Ditto.	
Monday, Thursday ...	150	Rice, salt, oil, &c.	
Wednesday, Sunday ...	300	Paddy, rice, fish, &c.	
Tuesday, Saturday ...	1,200	Rice, salt, cocoanut, arecanut, vegetables, small boats, &c.	Post-office letter-box.
Wednesday, Saturday ...	300	Paddy, rice, &c.	

(c) Signifies that the place is also a cattle market.

APPENDIX No. 8.

Statement showing the statistics of the Export and Import Trade up to date since the opening of the Port of Morrellgunge.

A. D.	Names of Vessels.	Export Trade.		Import Trade—Salt.	Remarks.
		Rice.	Betelnut.		
		Mds.	Mds.	Mds.	
1870 ...	*Natmoo*	10,000	.....	.....	
	Mary and Emma	8,800	.....	.....	
1871 ...	*Caroline*	17,974	.....	.....	
	Natmoo	9,924	6,066	.....	
	Antelope	6,000	.....	.....	
1872 ...	*Natmoo*	19,878	.....	.....	Took out two cargoes.
	Peru	16,000	.....	.....	
1873 ...	*Peru*	16,000	.....	.....	
	Avery	14,400	.....	.....	
	Natmoo	10,000	.....	.....	
	Colonel Fytche	16,000	.....	.....	
	Caroline	17,800	.....	.....	
	Syringa	17,200	.....	530	
	Hilarion	18,800	.....	.....	
	Total ...	198,776	6,066	530	

APPENDIX No. 9.

Return of Export Trade in Thannahs Baghat, Rampal, and Morrellgunge, in Sub-Division Baghat.

	Rice.		Paddy.		Betelnuts.		Cocoanuts.		Date sugar.		Goor.		Jute.	
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
1868-69...	122,056	1,99,137	144	72	1,433	9,046	.....	.....	6,621	39,522	465	974	.....	.....
1869-70...	319,940	5,25,020	200	100	2,850	10,478	.....	.....	7,301	43,348	490	1,078	131	391
1870-71...	470,953	8,82,132	300	150	1,862	6,592	.....	.....	6,821	40,228	454	1,021	.....	.....
1871-72...	524,958	10,26,969	450	225	2,152	7,899	.....	.....	6,928	40,932	620	1,317	48	144
1872-73...	615,985	11,06,954	500	250	17,090	44,054	320,900	6,418	7,071	41,829	476	1,077	273	468

APPENDIX No. 10.

Return of Import Trade in Thannahs Baghat, Rampal, and Morrellgunge, in Sub-Division Baghat.

	Salt.		Oil.		Tobacco.		Pulses.		Mustard.		Cotton.		Cane sugar.		Cloth.		Mule twist.		Iron.	
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
1868-69	20,755	92,031	1,927	20,385	3,946	23,037	2,882	6,679	1,022	4,205	32	235	573	4,014	...	22,709	...	536	219	957
1869-70	23,633	1,01,118	999	926	3,975	24,890	2,713	7,152	515	1,958	890	6,996	539	3,776	...	25,191	...	810	198	821
1870-71	21,050	89,112	1,283	13,115	4,959	46,275	3,077	8,547	1,004	3,743	709	5,188	485	4,593	...	49,203	...	2,048	343	1,375
1871-72	24,275	99,051	1,318	13,394	4,584	31,829	3,029	5,617	3,597	12,652	141	1,019	454	3,822	...	42,168	...	2,380	555	2,253
1872-73	29,922	1,23,837	1,821	18,625	5,187	29,799	2,986	5,867	5,459	21,057	381	3,089	510	3,641	...	43,938	...	2,286	554	2,948

APPENDIX No. 11.

G.—*Manufactures.*

Sub-Division Baghat (Thannah Mollahat excepted).	Manufactures.									
	Cotton.	Wood.	Iron.	Brass and copper.	Sugar-cane molasses.	Sugar (dák).	Pottery.	Oil.	Gold and silver.	Tanneries.
Private looms or small works	854	46	76	1	127	22	224	284	58	26
Number of workmen in small works or independent artizans	1,762	84	160	1	1,016	145	473	332	109	82
Estimated annual out-turn of all works	30,744	6,900	10,336	100	162,600	30,269	12,320	26,980	8,120	936

APPENDIX No. 12.

Return of river-borne trade passing through the Bhairab westward from 19th August to 15th September 1873.

DISTRICTS FROM WHICH EXPORTED.	Rice.	Paddy.	Food-grains.	Potatoes.	Oil seeds.	Condiments.	Betelnuts.	Cocoanuts, in number.	Tobacco.	Jute.	Lime.	Timber.	Fuel.	Brassware.	Pottery, in number.	Mats, in number.	Passengers, in number.	Sugar.	Birds, in number.	Miscellaneous.	REMARKS.
	M.	M.	M.	M.	M.	M.	M.		M.	M.	M.	M.	M.	M.				M.			
Jessore	15,777	1,510	...	...	...	268	368	65,405	...	...	...	...	...	20	...	...	..	11,033	...	375	Total number of boats laden, 1,170.
Sunderbuns	.....	...	...	...	...	...	...	.....	...	...	...	24,392	14,040	...	...	...	...	...	...	...	Total capacity in mds. 444,861.
Burrisal	155,948	19,471	1,588	...	2,505	100	6,463	215,125	825	4,595	...	2,170	...	220	2,000	18,000	20	...	...	1,000	
Noakhally	40,811	...	...	...	...	...	8,380	.....	...	...	...	...	...	...	...	...	473	...	...	...	
Tipperah	4,716	...	...	...	...	...	350	.....	...	1,110	...	...	...	...	...	...	...	...	600	740	
Chittagong	3,575	...	...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	
Dacca	38,231	1,350	1,010	...	3,675	...	875	.....	...	6,810	...	...	...	...	...	...	...	...	...	...	
Sylhet	5,684	3,900	...	7,705	11,360	25	200	.....	...	...	37,872	...	...	...	...	14,000	29	...	...	20	
Mymensing	1,300	...	...	...	390	2,775	...	.....	...	550	...	...	...	...	...	...	...	...	...	...	
Total ...	266,042	26,231	2,598	7,705	17,930	3,168	16,636	280,625	825	13,065	37,872	26,562	14,040	240	2,000	32,000	522	11,033	600	2,135	

APPENDIX No. 12.

Return of river-borne trade passing eastward through the Bhairab from 19th August to 15th September, 1873.

DISTRICTS TO WHICH IMPORTED.	Food-grains.	Oil seeds.	Condiments.	Cocoanuts.	Goor and sugar.	Tobacco.	Timber.	Fuel.	Salt.	Brassware.	Cloth and mulo twist.	Coal.	Pottery.	Mats.	Passengers.	Birds.	Miscellaneous.	REMARKS.
	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Bales.	Mds.	No.	No.	No.	No.		
Jessore	...	...	64	.....	...	...	3,101	8,693	500	...	...	...	...	...	...	...	...	Total number of boats laden, 623.
Burrisal	620	890	3,533	16,000*	9,410	204	8,356	4,509	6,500	220	615	8,750	55,000	1,000	20	100	2,990	Capacity in maunds, 147,605.
Noakhally	...	...	...	.....	...	...	...	...	2,200	...	259	...	...	...	...	...	924	
Tipperah	...	...	...	.....	...	...	...	...	300	...	40	...	...	...	20	...	...	
Chittagong	...	...	...	.....	200	...	...	...	...	...	20	...	...	...	...	...	713	
Dacca	...	...	...	.....	444	...	...	...	19,134	...	14	...	...	...	...	...	600	
Sylhet	130	...	300	.....	1,449	50	...	...	11,900	200	216	...	1,000	...	...	...	3,147	
Mymensing	...	...	...	.....	504	...	...	...	2,000	...	...	...	...	...	...	...	660	
Furreedpore	...	...	...	.....	...	...	12,935	568	...	...	...	...	...	...	...	...	...	
Total	750	890	3,897	16,000	11,807	254	24,392	13,770	42,534	420	1,164	8,750	56,000	1,000	40	100	9,034	

* Exported from Baghat, district Jessore.

APPENDIX No. 13.

TENURES.

Below the zemindars in the permanently settled estates and the talukdar in the Sunderbun grants there are numerous intermediate holders whose rights are enumerated below:—

Holders with permanent fixed rights.

Tenures with permanent fixed rights exist in a graduated scale, such as—

Zimma Taluk,
Taksimi Taluk,
Shikmi Taluk,
Shamilat Taluk,
} Terms which apply to the same sort of tenure.

held from time of permanent settlement, the rent being payable to the zemindar, who can neither enhance nor oust. There are 291 *shamilat* taluks in pergunnah Cherulia, and 197 in pergunnah Madhudia.

A *dar sikimi taluk* is subordinate to a *sikmi* with permanent fixed rights.

A *ganti jumma* in pergunnah Hogla is a tenure derived from the zemindar after the permanent settlement, the rent being fixed.

A *páttae taluk* is derived from a zemindar under a *páttá* with a fixed rent.

An *osat taluk* is an intermediate tenure derived from a talukdar in the Sunderbuns on payment of premium, the rent being fixed.

A *nim osat taluk* is a tenure subordinate to an *osat taluk*.

A *pattan nim osat taluk* is below the above.

We now come to treat of the cultivators of the soil who have permanent rights:—

A *hawala* is a subordinate tenure created by the talukdar or his inferiors in rank, *osat* or *nim osat* talukdars, in the Sunderbuns. It has permanent rights, the rent being fixed. It corresponds to the *jumma* of the north. An *osat hawala* is a tenure derived from the *hawaladar*, the rights being similar.

A *nim hawla* is subordinate to the same.

An *osat nim hawla* is derived from a *nim hawla*.

A *pattanie nim hawla*, subordinate to all these, is also to be met with in some cases here.

A *miras ezara* is a perpetual lease which may be given at a fixed rent by all under-tenants enumerated above.

A *karshá málgazari* tenure is a *jote* in which a right of occupancy has accrued. If the rent is not enhanceable it is called *kaemi* or *miras karshá*. If the rent has been fixed for a term it is called *miadi karshá*.

Pattaniás are tenants corresponding to the *kol jana* ryots of the north holding at will under the cultivator for a year or two, the rent being payable to him.

APPENDIX No. 14.

Statement shewing the quantity of land held under each crop by cultivators and others, Sub-Division Bagirhat (Thannah Mollahat excepted).

	Name of Police Station.			
	Bagirhat.	Rampal.	Morrellgunge.	Total.
Number of Houses according to occupation—				
Cultivators	13,859	5,147	7,037	26,043
Shop-keepers	1,474	114	38	1,626
Laborers	2,202	391	151	2,744
Talukdars and servants	1,821	31	368	2,220
Priests	196	.....	.....	196
Pan (betel-leaf) sellers	226	.....	.....	226
Artizans...	589	.....	56	645
Total ...	20,367	5,683	7,650	33,700
Quantity of land in acres held by Cultivators—	A. R. P.	A. R. P.	A. R. P.	A. R. P.
Food-grains	72,542 2 3	42,840 0 9	63,315 1 25	178,697 3 37
Other lands besides food-crops—				
Gardens	3,942 0 32	350 2 36	761 2 2	5,054 1 30
Jute	199 1 5	26 2 16	17 0 36	243 0 17
Tobacco	4 1 25	.....	.....	4 1 25
Thatching straw	793 1 3	20 0 0	394 2 31	1,207 3 34
Vegetables	165 2 18	17 2 8	85 3 18	269 0 4
Pan	96 2 32	.....	.....	96 2 32
Cotton	7 1 17	17 1 16	.....	24 2 33
Condiments	.....	.....	4 3 17	4 3 17
Sugarcane	132 0 36	1 1 12	766 0 33	899 3 1
Total ...	77,883 2 11	43,273 2 17	65,345 3 2	186,502 3 30
Fallow	3,279 1 14	2,469 2 35	503 0 0	6,252 0 9
Homestead	1,487 2 18	456 1 18	465 0 16	2,409 0 12
Total ...	82,650 2 3	46,199 2 30	66,313 3 18	195,164 0 11
Land held by non-cultivators	9,418 1 22	431 0 15	204 2 19	10,054 0 16
Number of ploughs	13,102	8,358	10,200	31,660

APPENDIX No. 15.

Number and size of farms in Baghat Sub-Division.

Name of Thannah.	Under 3 acres.	3 and under 10.	10 and under 20.	20 and under 30.	30 and under 50.	50 and under 100.	Of all sizes.
Baghat	13,777	5,613	828	98	37	14	20,367
Rampal	2,137	2,707	676	124	34	5	5,683
Morrellgunge	1,217	4,725	1,246	311	119	32	7,650
Total ...	17,131	13,045	2,750	533	190	51	33,700

APPENDIX No. 16.

Table of Land Measure and Dry Weight, &c., used in Sub-Division Bagirhat (Thannah Mollahat excepted).

Standard Measure.	Thannah Bagirhat.			Thannah Rampal.	Thannah Morrellgunge.
	Bagirhat.	Out-post Fakirhat.	Out-post Kochua.		
	Land Measure.				
16 Chattacks = 1 Cottah. 20 Cottahs = 1 Beegha. *Compared with English Measure.* 324 sq. inches ... ... = 1 sq. cubit. 6,480 ditto or 20 sq. cubits ... ... = 1 Chattack. 103,680 sq. inches or 320 Sq. cubits ... = 1 Cottah. 2,073,600 sq. inches or 6,400 sq. cubits ... ... = 1 Beegah.	324 sq. in = 1 sq. cubit. 3,240,000 sq. in, or 10,000 sq. cubits = 1 Beegah. 1 Beegah, 11 Chattacks of Standard Measure = 1 Beegah.	506¼ sq. in. = 1 sq. cubit. 3,240,000 sq. in, or 6,400 sq. cubits = 1 Beegah. 1 Beegah 11 Cottahs, 4 Chattacks of Standard Measure = 1 Beegah.	324 sq. in. = 1 sq. cubit. 3,890,400 sq. in, or 12,100 sq. cubits = 1 Beegah. 1 Beegah 17 Cottahs, 8·4 Chattacks of Standard Measure = 1 Beegah.	1,024 sq. in = 1 sq. yard. 3,097,600 sq. in, or 3,025 sq. yards = 1 Beegah. 1 Beegah 9 Cottahs, 1·5 Chattacks of Standard Measure = 1 Beegah.	Same as in Kochua.
Standard Weight.	**Dry Weight.**				
5 Tolahs ... ... = 1 Chattack. 4 Chattacks ... ... = 1 Poa. 4 Poas, or 80 Tolahs ... = 1 Ser. 40 Sers or 3,200 Tolahs ... = 1 Maund.	60 Tolahs = 1 Ser. ... 8 Sers = 1 Adla. ... 2 Adlas = 1 Kati. ... 20 Katis = 1 Bis. ... 3¾ Katis = 1 Standard Maund of 3,200 Tolahs.	60 Tolahs = 1 Ser. 8 Sers = 1 Poaika. 4 Poaikas = 1 Kati. 20 Katis = 1 Sali, 6·6 Poaikas = 1 Standard Maund of 3,200 Tolahs.	60 Tolahs = 1 Ser. 10 Sers = 1 Kati. 20 Katis = 1 Bis. 16 Bis = 1 Pati. 3¾ Katis = 1 Standard Maund of 3,200 Tolahs.	60 Tolahs = 1 Ser. 12 Sers = 1 Araiser. 20 Araisers = 1 Sali. 4·5 Araisers = 1 Standard Maund of 3,200 Tolahs.	60 Tolahs = 1 Ser. 11 Sers = 1 Chunia. 3 Chunias = 1 Kati. 20 Chunias or 6⅔ Katis = 1 Bis. 4·84 Chunias = 1 Standard Maund.
	Betelnut by Tale.				
	11 Units = 1 Gha. 21 Ghas = 1 Kuri or Score. 50 Kuris = 1 thousand or 11,550 units. *Pargana Rangdia.* 10 Units = 1 Gha. 22 Ghas = 1 Kuri or Score. 50 Kuris = 1 thousand	12 Units = 1 Gha. 22 Ghas = 1 Kuri or Score. 50 Kuris = 1 thousand or 13,200 Units.	Same as in Bagirhat.	Same as in Fakirhat.	Same as in Fakirhat.

Labour.	Bagirhat.
Wages per diem ... Skilled	5 to 7 annas.
Unskilled	3 to 5 „
Boat per day, two oared	12 annas.